

**NOISE IMPACT STUDY – Project: 21004.00**

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**Milton Quarry East Extension  
Noise Impact Study**  
Milton, ON

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Prepared for:

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December 7, 2021



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## Revision History

Version	Description	Author	Reviewed	Date
--	Initial Report	DAF	DF	December 7, 2021

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## 1 Introduction

CRH Canada Group Inc. is applying for a Class “A” licence for the proposed Milton Quarry East Extension located in parts of Lots 11 and 12, Concession 1 of the Town of Halton Hills. The proposed extension consists of 30.2 Hectares (ha) to be licensed with 15.9 ha to be extracted.

Aercoustics Engineering Limited (Aercoustics) was retained by CRH Canada Group Inc. (CRH) to prepare a Noise Impact Study (NIS) for the proposed Dufferin Aggregates Milton Quarry East Extension. The purpose of this study is to provide noise control recommendations for the quarry operations to satisfy the Ministry of the Environment, Conservation, and Parks (MECP) noise guidelines.

Sound level limits for quarry noise on the nearby noise-sensitive receptors are described in the MECP publication entitled “Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning”, dated August 2013 (NPC-300). Where the predicted levels were found to exceed the MECP sound level limits, noise control measures are proposed to satisfy these limits.

Figure 1 provides a key plan showing the location of the quarry. A site plan is provided as Figure 2, illustrating the quarry area and the locations of nearby receptors. Noise control recommendations are provided in Appendix A.

## 2 Site Description

The Milton Quarry operation comprises two existing licences (Licence ID 5481 and 608621). The original licensed area opened in 1962 covering 467 ha is labelled as the Main Quarry and North Quarry on Figures 1 and 2. The quarry was extended in 2007 to include the 83 ha directly to north and east of the North Quarry. These more recently licensed lands are labelled as the West Cell and East Cell on Figure 2.

The proposed Milton Quarry East Extension is situated immediately southeast of the existing East Cell to the west of Halton Hills Regional Road 25 and south of 15 Side Road. The surrounding land uses are primarily the existing quarry and environmental areas that are sparsely populated.

Figure 1 provides a key plan showing the location of the proposed Milton Quarry East Extension and surrounding area. The nearest single-family dwellings in the vicinity of the quarry are identified as receptors R1 through R24. A vacant lot in the vicinity of the quarry has been labelled as VL25. Receptors located on Dufferin Aggregates property are not considered noise sensitive. The location of each receptor is identified in Figure 2 with non-noise sensitive receptors labelled with grey font.

The existing Milton Quarry is approved to operate 24 hours per day and has an unlimited annual extraction limit, however, for the purposes of this NIS, a maximum daily production

scenario was developed in conjunction with CRH. This scenario reflects the reality of the equipment that is currently used or will be used at the existing Milton Quarry and proposed Milton Quarry East Extension.

The proposed Milton Quarry East Extension addressed in this Noise Impact Study consists of operations within the lands of each phase identified in Figure 2. These operations include excavation, processing (crushing, screening and washing), and aggregate haulage and shipping. The extraction from the proposed extension is proposed to be performed in one of two different scenarios.

### **2.1 Scenario 1**

In this scenario, operations in the Milton Quarry East Extension will consist of site preparation, drilling blast holes, blasting, extraction of shot rock from the muck pile and loading of haul trucks via front-end loader or excavator, hauling of shot rock from the muck pile, and site rehabilitation. Material will be hauled back to the main processing area in the existing Milton Quarry for processing, stockpiling and shipping. A portion of the material will be washed. Operations in the East Cell will wind down as the Milton Quarry East Extension begins operation, with the only significant overlap being rehabilitation activities in the East Cell.

### **2.2 Scenario 2**

In this scenario, the main processing area in the existing Milton Quarry will wind down. Processing in this area will consist only of one or two portable plants used to process recycled or material from under the main plant. Operations in the Milton Quarry East Extension will consist of site preparation, drilling blast holes, blasting, extraction of shot rock from the muck pile and loading of haul trucks via front-end loader or excavator, hauling of shot rock from the muck pile to the processing plants (located in both the East Cell and Main Quarry), processing, transportation, washing, stockpiling, and shipping of finished aggregate. A portion of the material will be washed.

## **3 Noise Criteria**

### **3.1 Acoustic Classification**

The appropriate noise criteria for the receptors in the vicinity of the proposed Milton Quarry East Extension were based on the MECF Noise Pollution Control publication NPC-300.

The points of reception R1 through R6, R9 through R24 and VL25 have an acoustic environment consistent with the Class 3 (Rural) designation while R7 and R8, which are influenced by Highway 401, have an acoustic environment consistent with the Class 2 (Urban) designation as defined by the MECF Publication NPC-300. In a Class 3 area, the background sound levels are dominated by natural sounds having little or no road traffic. In a Class 2 area the background sound levels are dominated by human activity during the daytime and the natural environment during the evening and night.

The applicable limits for noise from a stationary source at a noise-sensitive point of reception (receptor) in a Class 2 (Urban) and Class 3 (Rural) area are outlined in Table 1.

Table 1 - NPC-300 Exclusion Limits for Stationary Sources - Hourly  $L_{Aeq}$

Time of Day	Sound Level Exclusion Limit* Class 1 Area	Sound Level Exclusion Limit* Class 2 Area	Sound Level Exclusion Limit* Class 3 Area	Sound Level Exclusion Limit* Class 4 Area
Outdoor Points of Reception				
Day (07:00 to 19:00)	50 dBA	50 dBA	45 dBA	55 dBA
Evening (19:00 to 23:00)	50 dBA	45 dBA	40 dBA	55 dBA
Plane of Window of Noise Sensitive Spaces				
Day (07:00 to 19:00)	50 dBA	50 dBA	45 dBA	60 dBA
Evening (19:00 to 23:00)	50 dBA	50 dBA	40 dBA	60 dBA
Night (23:00-07:00)	45 dBA	45 dBA	40 dBA	55 dBA

or the minimum existing hourly background sound Level  $L_{eq}$ , whichever is higher

### 3.2 Non Noise Sensitive Receptors

The dwellings at R9, R14, R15 and R20 are not considered noise sensitive receptors in this study. These receptors are located on lands owned by Dufferin Aggregates but not within the property boundaries of the existing Milton Quarry or the proposed Milton Quarry East Extension. For these dwellings, the following conditions should be met:

- it be occupied by people associated with the quarry operations or who have entered into agreements with the quarry operators confirming that they are aware of any noise which may be generated by the quarry and which may interfere with some activities of the occupants;
- it be left vacant; or
- mitigation is implemented which satisfies the MECP sound level limits.

The majority of these receptors are located in close proximity to existing mineral aggregate operations in the area. It is understood that these receptors have existing agreements with CRH and as such do not require mitigation.

### 3.3 Vacant Lots

The MECP's noise guidelines document NPC-300 requires consideration for potential receptors on noise sensitive zoned lots. These are defined as lots that have been zoned to permit a noise sensitive use and that are either vacant or have an existing land use that is not a noise sensitive land use.

One vacant noise sensitive zoned lot, identified as VL25, was identified immediately west of the existing quarry, just east of the dwelling at Receptor R10. This vacant lot is owned by CRH and is intended to be left vacant while the quarry is in operation. No additional

vacant lots which permit dwellings were identified which would introduce new predictable worst-case locations.

## 4 Quarry Operations

The site plans for the proposed Milton Quarry East Extension outline the phases of extraction as well as the direction of operations in each phase. In general terms, the nature of the work consists of the following:

- Site preparation and rehabilitation
- Extraction and processing; and
- Shipment off-site.

### 4.1 Hours of Operation

The quarry is proposed to operate twenty-four hours a day seven days a week. Typical hours for different site operations are laid out in Table 2.

Table 2 – Typical Operating Hours of Proposed Milton Quarry East Extension

Time of Day	Day of Week	Operations
24 hours	Monday to Sunday	Extraction and Processing
05:30 – 17:00, typically (24 hours is proposed)	Monday to Sunday	Loading and Shipping
07:00 – 19:00	Monday to Sunday	Site Preparation and Rehabilitation
07:00 – 19:00	Monday to Sunday	Drilling

### 4.2 Site Preparation and Rehabilitation

Site preparation includes site clearing and the construction of any required berms as specified on the site plan. Topsoil and overburden will be removed. This work will be done primarily with bulldozers, scrapers, trucks, loaders, and excavators. Rehabilitation phases will involve similar equipment in establishing the final grading for the site.

The site preparation and rehabilitation work described above is not part of the daily operation of the quarry. These construction activities are not considered in the noise control analysis. The equipment used for these activities must satisfy the noise emission requirements of the MECP document NPC-115 “Construction Equipment”. By defining a maximum permissible noise emission for construction equipment, rather than directly limiting the noise impact at a sensitive point of reception, the MECP recognizes that construction is a temporary and largely unavoidable source of noise.

In order to minimize the noise impact associated with the construction activities, it is suggested that these activities should be restricted to the daytime hours.

### 4.3 Extraction, Processing and Transport

#### 4.3.1 Scenario 1

The maximum annual tonnage to be removed by the proposed Milton Quarry East Extension is unlimited. The material extracted from the Milton Quarry East Extension will be used to replace depleted reserves in the existing Milton Quarry. Material will be processed at the existing processing facility located in the Main Quarry.

Aggregate will be extracted from the Milton Quarry East Extension using three (3) drills, two (2) front end loaders and one (1) excavator at the working face. Material will be transported from the Milton Quarry East Extension via off-road trucks directly to the processing area in the Main Quarry that contains one (1) permanent processing plant, one (1) secondary processing plant, one (1) sorting facility, one (1) wash plant and two (2) portable processing plants. Processed materials will be stored in stockpiles in the vicinity of the processing area. Seven (7) shipping loaders will be used in the processing area to load highway trucks with finished aggregate product for transport to market.

#### 4.3.2 Scenario 2

The estimated annual tonnage to be removed by the proposed Milton Quarry East Extension is 2 million tonnes due to a reduction in processing equipment on-site. The permanent processing plant in the Main Quarry will be removed and processing will be carried out using a portable processing plant located in the East Cell. Products will be transported from the East Cell on highway trucks to customers using existing haul routes through the Main Quarry.

Aggregate will be extracted using three (3) drills, two (2) front end loaders and one (1) excavator at the working face. Material will be transported via off-road trucks directly to one (1) main portable processing plant located in the East Cell or, from time to time, two (2) portable processing plants located in the Main Plant. Processed materials will be stored in stockpiles in the vicinity of the processing area. Seven (7) shipment loaders will be used in the processing area to load highway trucks with finished aggregate product for transport to market.

### 4.4 Equipment

The extraction, processing, and shipment equipment operating in the proposed quarry extension is limited to:

#### Scenario 1

##### *Milton Quarry East Extension*

- Three (3) Rock Drills
- Two (2) Extraction Loaders
- One (1) Excavator
- 24 Off-Road truck trips/hr (48 passes/hr)



*Milton Quarry Extension (East and West Cells)*

- 168 Highway truck trips/hr (336 passes/hr)
- 24 Off-Road truck trips/hr (48 passes/hr)

*Main Quarry and North Quarry*

- Seven (7) Shipment Loaders
- One (1) Portable Processing Plant
- One (1) Large Portable Processing Plant
- Two (2) Front-End Loaders
- One (1) Permanent Processing Plant (underground)
- One (1) Secondary Processing Plant
- One (1) Sorting Facility
- One (1) Wash Plant
- 168 Highway truck trips/hr (336 passes/hr)
- 24 Off-Road truck trips/hr (48 passes/hr)

Scenario 2*Milton Quarry East Extension*

- Three (3) Rock Drills
- Two (2) Extraction Loaders
- One (1) Excavator
- 32 Off-Road truck trips/hr (64 passes/hr)

*Milton Quarry extension (East and West Cells)*

- One (1) Portable Processing Plant
- One (1) Wash Plant
- Five (5) Shipment Loaders
- 168 Highway truck trips/hr (336 passes/hr)
- 32 Off-Road truck trips/hr (64 passes/hr)

*Main Quarry and North Quarry*

- One (1) Portable Processing Plant
- One (1) Large Portable Processing Plant
- Two (2) Front-End Loaders
- Two (2) Shipment Loaders
- 168 Highway truck trips/hr (336 passes/hr)

The locations of plant equipment for Scenario 1 located in the Main Quarry area reflects current operations and are not expected to change. The equipment for extraction of the proposed Milton Quarry East Extension is assessed at the worst-case locations. Portable

plants are expected to comprise of different equipment for crushing, screening and washing and generators for power generation.

## 5 Noise Prediction and Controls

### 5.1 Noise Prediction Methodology

The proposed aggregate quarry operations, as described above, have been modelled using DataKustik's noise prediction software *CadnaA*. This modelling is based on established noise prediction methods outlined in the ISO 9613-2 standard entitled "*Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method and calculation*".

The noise predictions are based on the predictable worst-case noise impact for each of the aggregate quarry operation areas at each noise-sensitive receptor. This represents a design case where the quarry is operating at full capacity with all of the equipment operating simultaneously and at locations where the noise impact is highest for each receptor. It is expected that a majority of the quarry operations would occur in other areas of the site, resulting in lower associated noise impacts.

Noise levels were predicted using existing topography under conditions of downwind propagation, generally with hard ground modelled in the quarry area and soft ground conditions elsewhere. The current topography of the existing quarry property was considered; if there are any changes to this such as removal of existing berms, the noise controls may need to be revised. Appendix B contains sample stationary noise source calculations.

Where noise predictions have indicated the potential of exceedance of the applicable sound level limits, noise control measures have been established to satisfy these limits.

### 5.2 Quarry Noise Sources

The reference sound levels used for the aggregate quarry equipment are outlined in Table 3. Noise measurements were conducted at the Milton Quarry by Aercoustics personnel on site visits: May 20, 1999, October 12, 2007, May 11, 2021, and August 26, 2021. The assumed sound levels for quarry equipment not measured in those site visits were based on Aercoustics' measurements of similar equipment at other aggregate operations.

Table 3 - Reference Sound Pressure Levels of Aggregate Quarry Equipment

Equipment	Reference Sound Pressure Level at 30m (dBA)
Rock Drill	85
Extraction Loader	76
Excavator	70
Shipment Loader	70 <sup>1</sup>
Portable Processing Plant	83
Large Portable Processing Plant	87
Main Portable Processing Plant	92
Permanent Processing Plant	72
Secondary Processing Plant	84
Sorting Facility	86
Wash Plant	73
Highway Truck	68
Off-Road Truck	74

<sup>1</sup> – The shipment loaders were assumed to operate at a 50 % duty cycle.

### 5.3 Recommended Noise Controls

The recommended noise controls presented in this section and in Appendix A have been determined, through noise impact predictions, to be effective in limiting the noise impact from the aggregate quarry activities to levels which comply with the MECP sound level limits. It should be noted that there may be other effective noise controls that could replace or revise those put forth in this report. Prior to the implementation of any changes to the noise controls, appropriate studies should be undertaken to demonstrate that the MECP sound level limits will be satisfied.

An acoustic barrier is required to be solid, with no gates or openings, and shall satisfy a minimum area density of 20 kg/m<sup>2</sup>. Such a barrier may take the form of a quarry face, stockpile, acoustic fence, ISO container(s), some combination of these, or any other construction satisfying the requirements of an acoustic barrier.

Refer to Figures 3 to 5 for requirements for Scenario 1 and Figures 6 to 8 for requirements for Scenario 2. These figures include an illustration of the timing and implementation of noise controls such as local drilling acoustical barriers.

Refer to Appendix A for a comprehensive summary of the recommended noise controls for the proposed Milton Quarry East Extension.

The noise controls presented in this report do not replace existing noise controls for extraction in other areas of the quarry.

#### 5.4 Predicted Sound Levels with Controls

The predicted worst-case noise levels produced by operations within the proposed Milton Quarry East Extension area are summarized in Table 4 below.

Table 4 - Milton Quarry East Extension - Worst Case Predicted Sound Levels and Criterial - Hourly  $L_{EQ}$  (dBA)

Point of Reception	Sound Level Limits		Maximum Predicted Sound Level			
			Scenario 1		Scenario 2	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	45	40	36	33	36	35
R2	45	40	37	34	37	35
R3	45	40	40	36	40	38
R4	45	40	40	39	39	36
R5	45	40	39	37	42	37
R6	45	40	40	37	40	39
R7	50	45	47	45	40	39
R8	50	45	47	45	45	45
R10	45	40	42	37	44	44
R11	45	40	45	37	42	39
R12	45	40	45	39	41	38
R13	45	40	41	36	41	38
R16	45	40	45	37	41	37
R17	45	40	42	37	44	38
R18	45	40	42	36	42	38
R19	45	40	42	37	42	38
R21	45	40	40	35	42	40
R22	45	40	40	34	43	39
R23	45	40	39	34	43	39
R24	45	40	39	34	42	38

With the incorporation of the recommended noise controls, the predicted noise impact will satisfy the MECP sound level limits at all receptor locations.

#### 5.5 Cumulative Noise Impact

The predictable worst-case of operation of the quarry was designed to satisfy the MECP sound level limits. This represents an operating condition when the equipment in the proposed quarry is positioned such that the noise impact at the residential receptors is highest.

Given the timing and setback distance of the Milton Quarry East Extension relative to the other neighbouring Milton Quarry operations, it is very unlikely that their respective operation cycle will occur where noise impact is highest at the same receptor at the same time.

Noise controls have been designed such that extraction from each Milton Quarry operation meets MECP noise limits. In the unlikely event that an overlap occurs between two sites, a combined noise level of 3 dB above the sound level limits is possible. In environmental noise, a change in sound level of 3 dB is perceived as minor. It is a change in sound level that most people would just barely notice.

## 6 Truck Traffic Noise on Haul Route

The noise impact of truck traffic on public roadways is not addressed by the MECP in their noise guidelines. However, the MECP requires consideration of the noise impact in choosing the off-property haul route.

The aggregate material from the proposed Milton Quarry East Extension will be shipped to market through the existing Milton Quarry via the existing entrance in both scenarios. Trucks leaving site with aggregate material will then exit onto Dublin Line moving south using the existing haul routes.

Since the quarry extension truck traffic will use the same haul routes, no significant change in truck trips is expected to occur compared to the operation of the existing Milton Quarry.

With this, the proposed haul route is not expected to cause a change in road traffic noise and is considered the preferred haul route in the context of noise impact.

## 7 Conclusion

Aercoustics has conducted a noise impact study for the proposed Milton Quarry East Extension. The purpose of this noise impact study was to provide noise control recommendations for the quarry operations to satisfy the MECP noise guidelines. Figure 2 provides a site plan outlining the aggregate quarry areas and the locations of nearby receptors.

Sound level limits were developed based on the MECP noise guidelines. Calculations were then carried out to determine the worst-case noise impact for each phase of the aggregate quarry operation, at each noise-sensitive receptor. Where noise predictions indicated the potential of exceedance of the MECP sound level limits, noise control recommendations were provided.

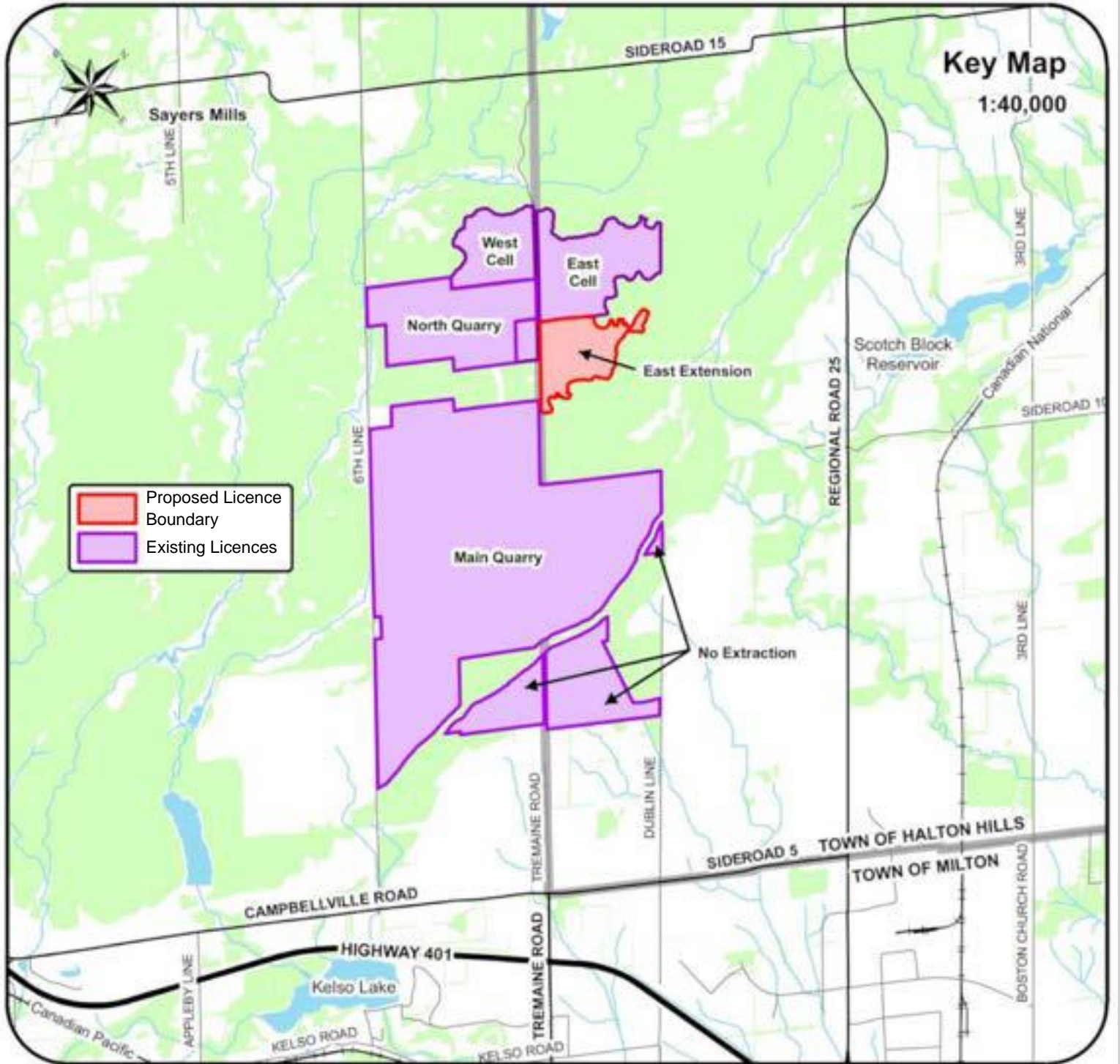
Appendix C provides a summary of the qualifications of the authors.

With the implementation of the recommended noise controls, the proposed aggregate quarry operation is predicted to satisfy the MECP noise guidelines and not result in an adverse effect on surrounding sensitive receptors.

## Statement of Limitations

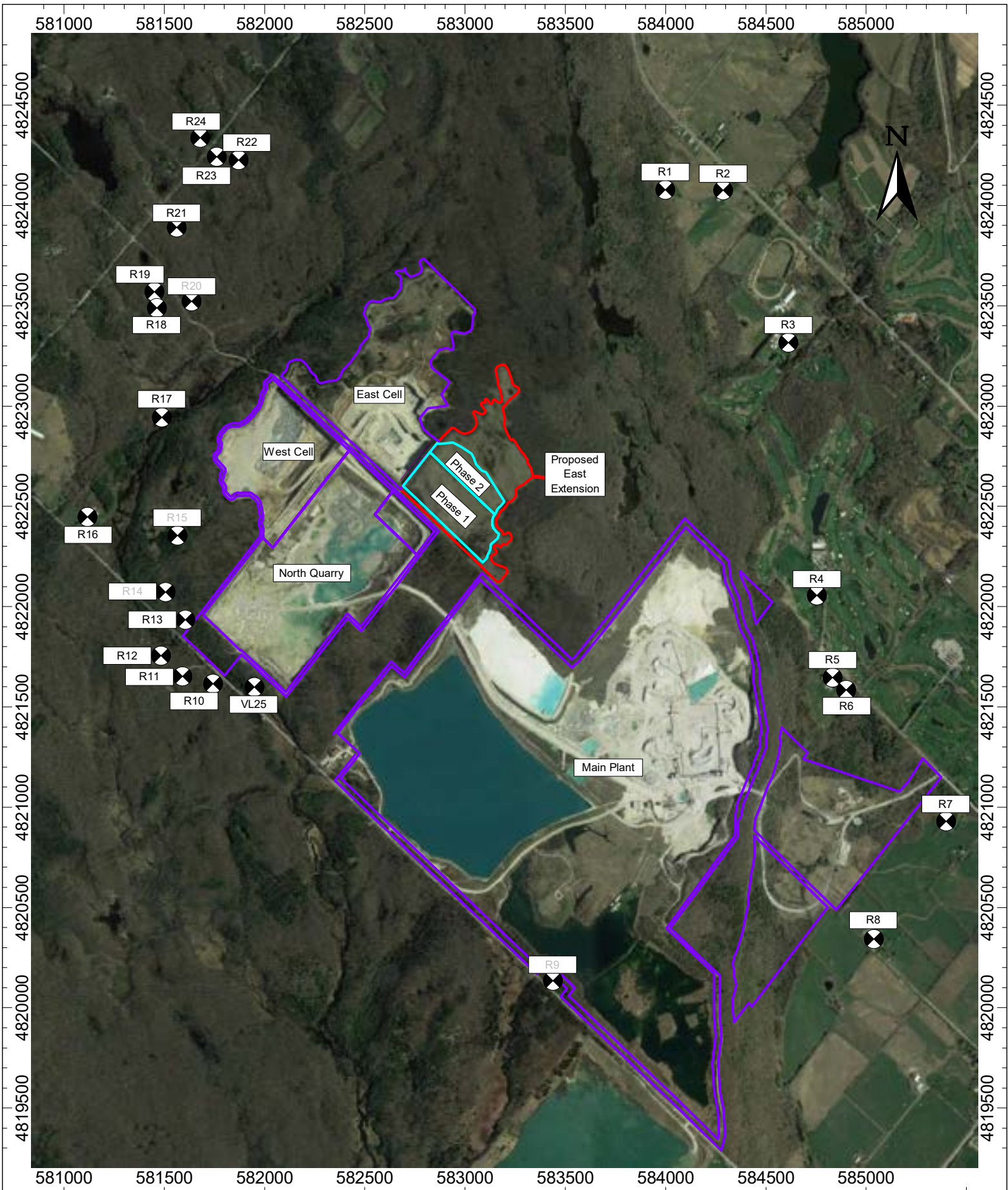
This report was prepared by Aercoustics Engineering Limited (Aercoustics) solely for the client identified above and is to be used exclusively for the purposes set out in the report and to support the regulatory review process for its Milton Quarry East Extension Application. In connection therewith, this document may be reviewed and used by Governmental Authorities in the normal course of their duties. The material in this report reflects the judgment of Aercoustics based on information available to them at the time of preparation. Unless manifestly incorrect, Aercoustics assumes information provided by others is accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented. Aercoustics accepts no responsibility for damages, if any, suffered by any Third Party which makes use of the results and conclusions presented in this report.






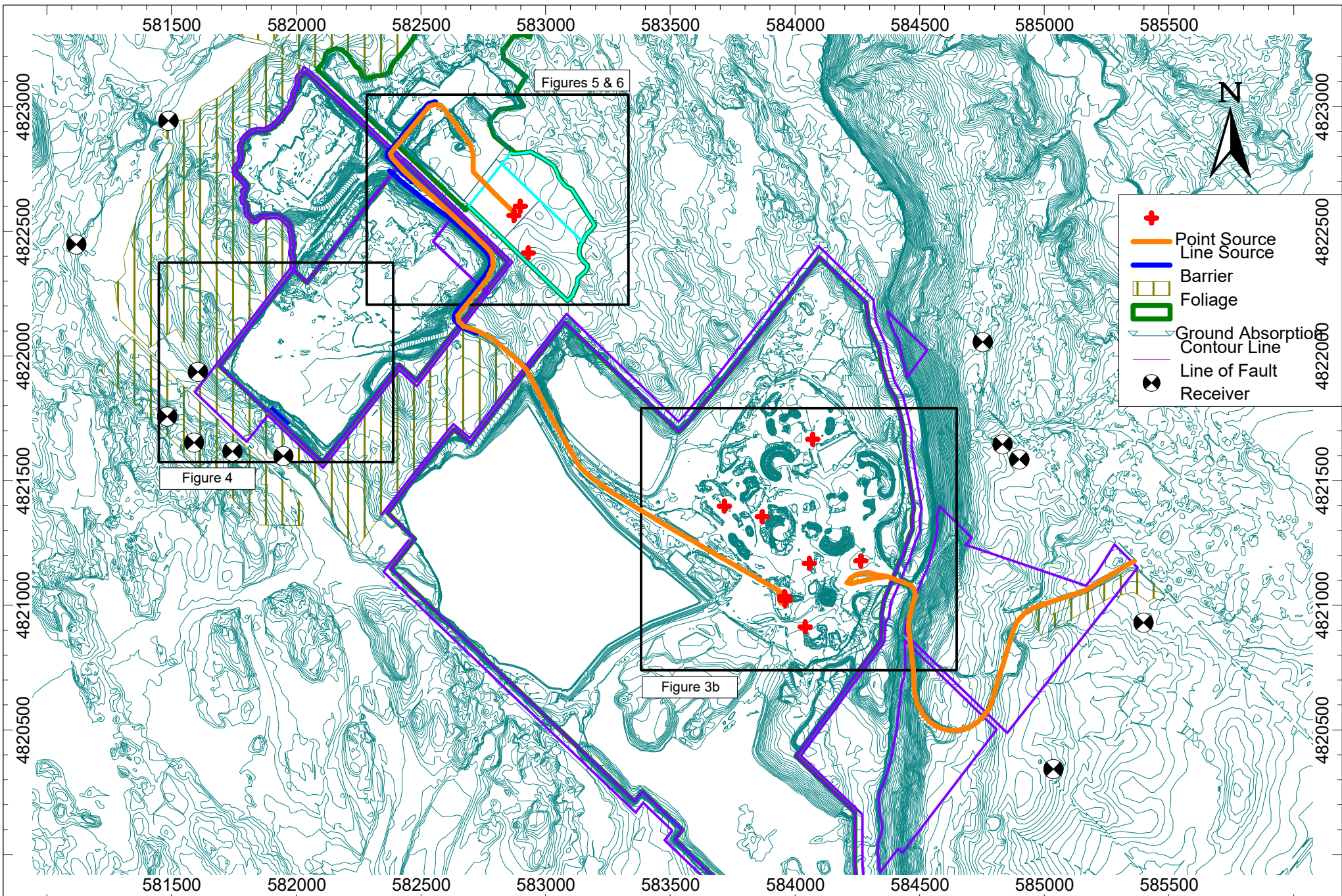
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	Project ID: 21004.00	Project Name	<b>Figure 2</b>
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Noise Sensitive Receptors			





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Milton Quarry East Extension

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Figure Title

Scenario 1 - Plant Equipment Layout

**Figure 3a**







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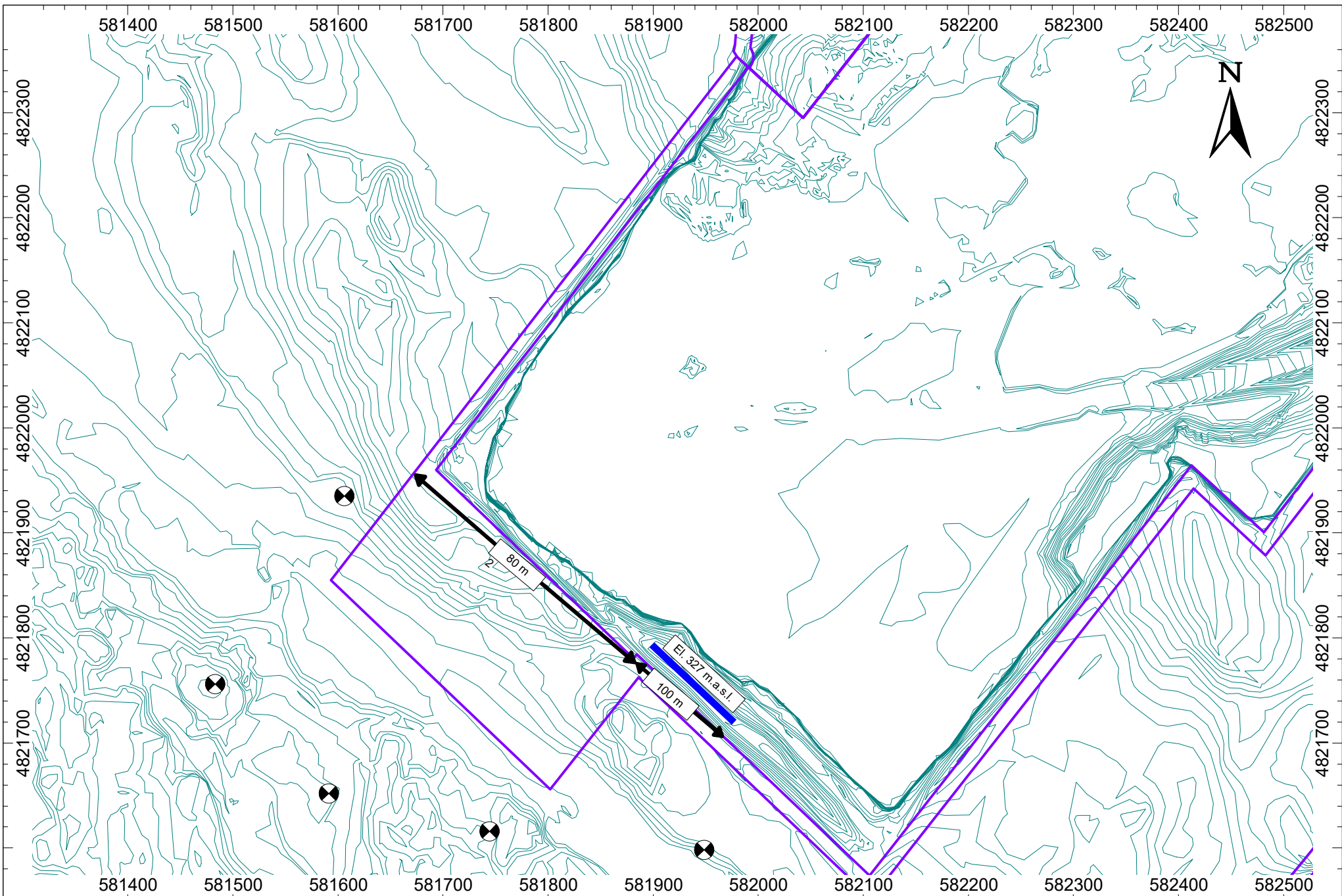
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Milton Quarry East Extension

Figure Title

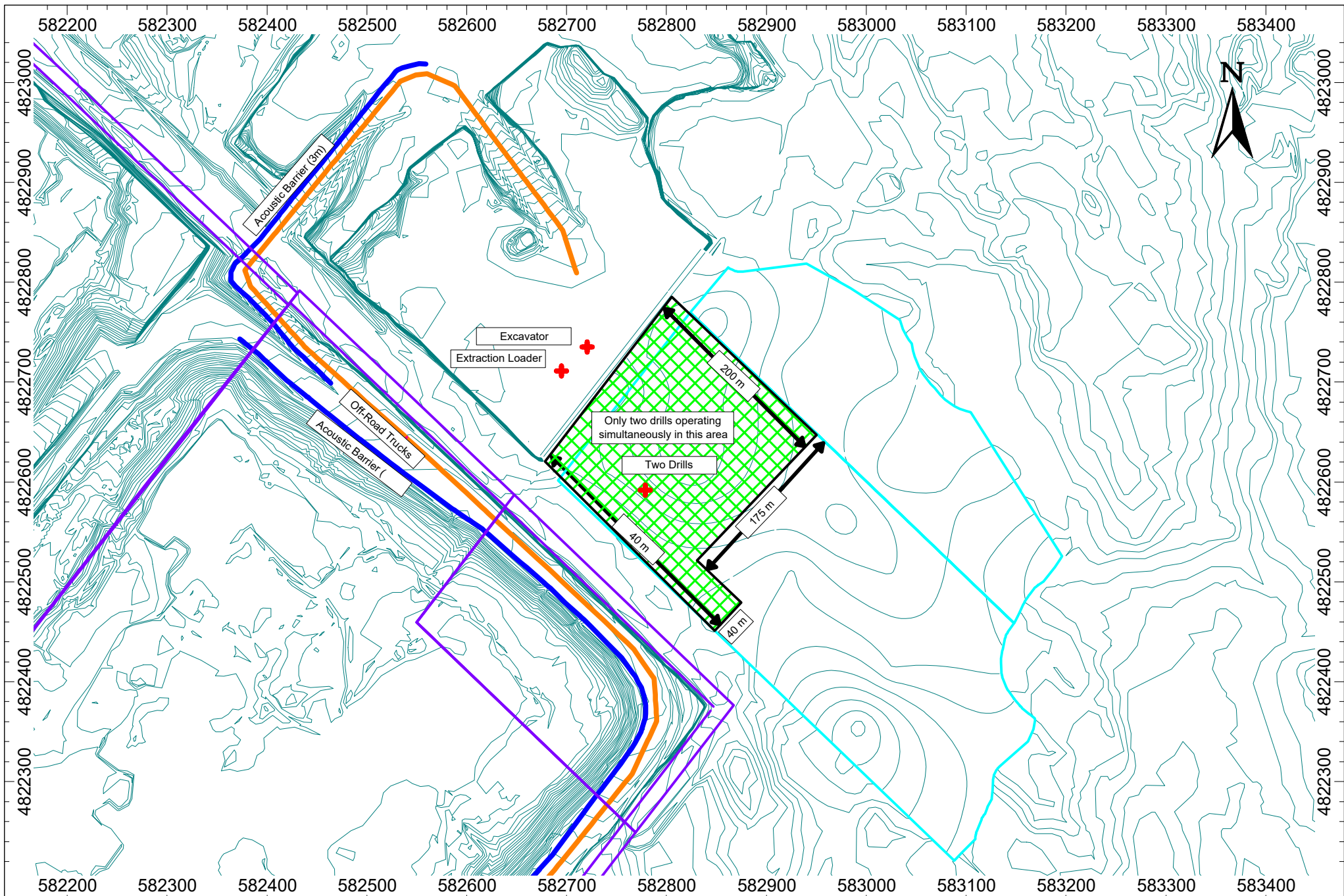
Scenario 1 - Main Quarry Equipment Layout


**Figure 3b**

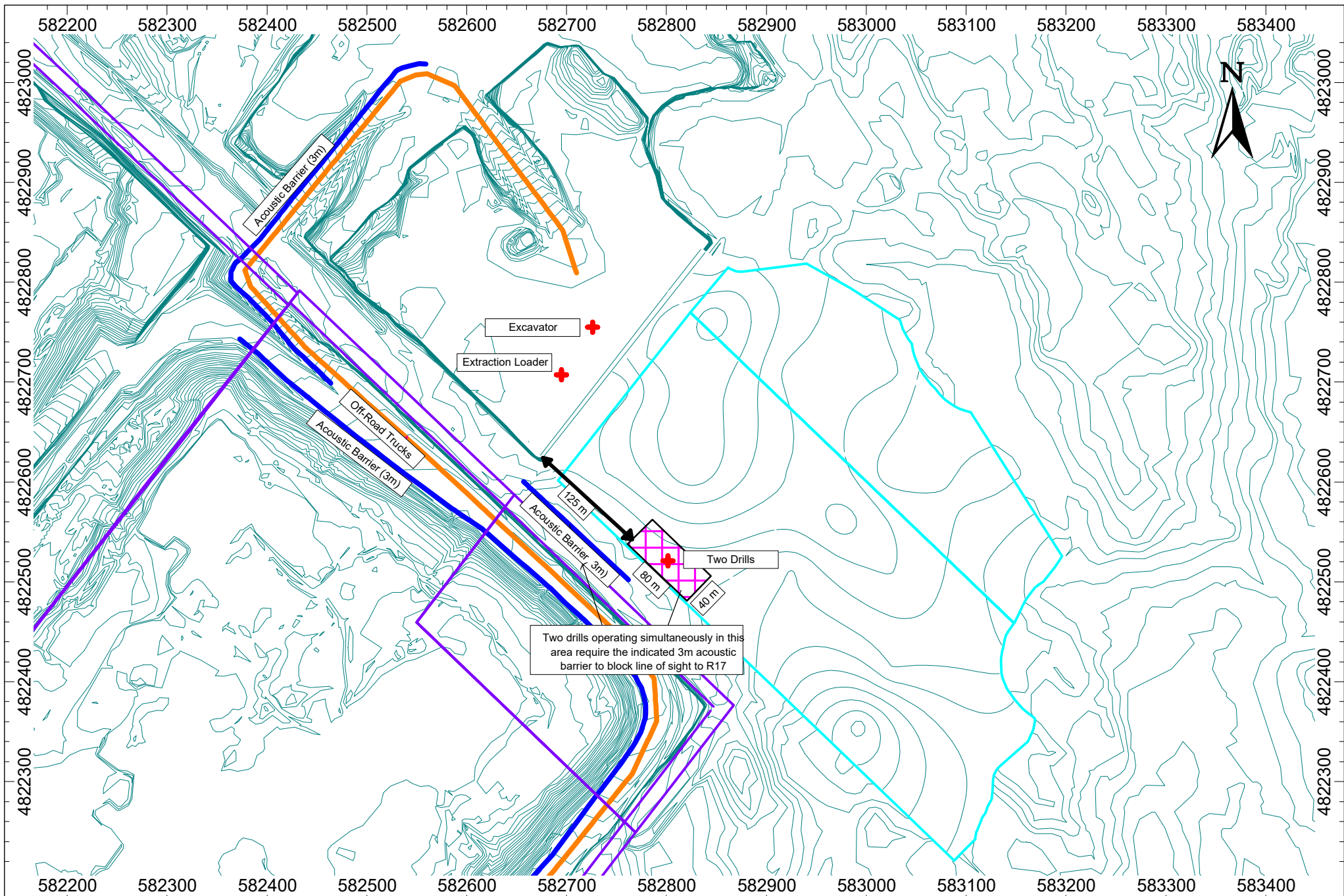



	<b>Project ID:</b> 21004.00	<b>Project Name</b> Milton Quarry East Extension	<b>Figure Title</b> North Quarry Berm Elevations	<b>Figure 4</b>
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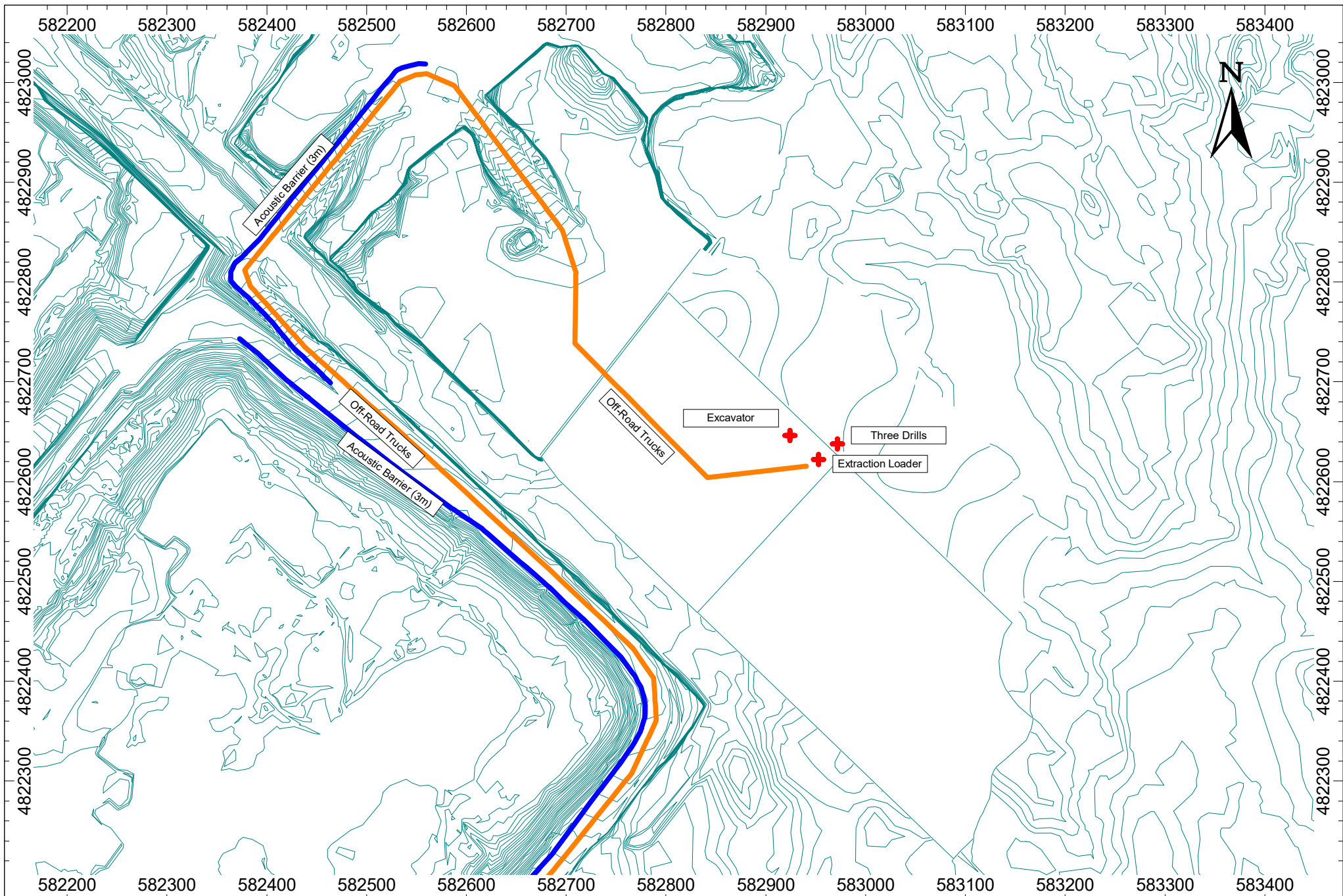
	<b>Project ID:</b> 21004	<b>Project Name</b> Milton Quarry East Extension	<b>Figure Title</b> Scenario 1 - Noise Control Implementation - Phase 1
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	<b>Project ID: 21004</b>	<b>Project Name</b> Milton Quarry East Extension	<b>Figure Title</b> Scenario 1 - Noise Control Implementation - Phase 1
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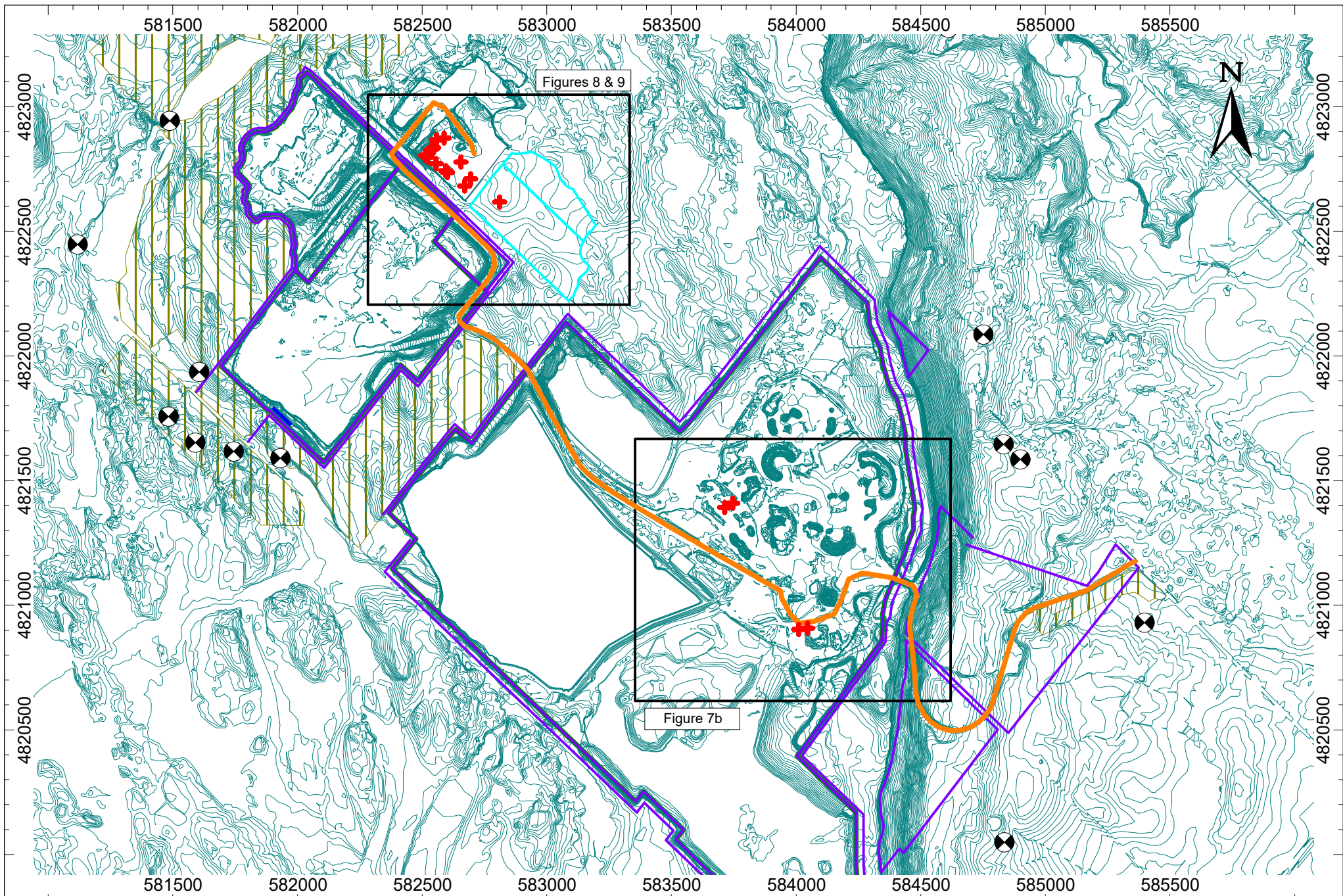
**Figure 5b**





	<b>Project ID:</b> 21004	<b>Project Name</b> Milton Quarry East Extension	<b>Figure Title</b> Scenario 1 - Noise Control Implementation - Phase 2	<b>Figure 6</b>
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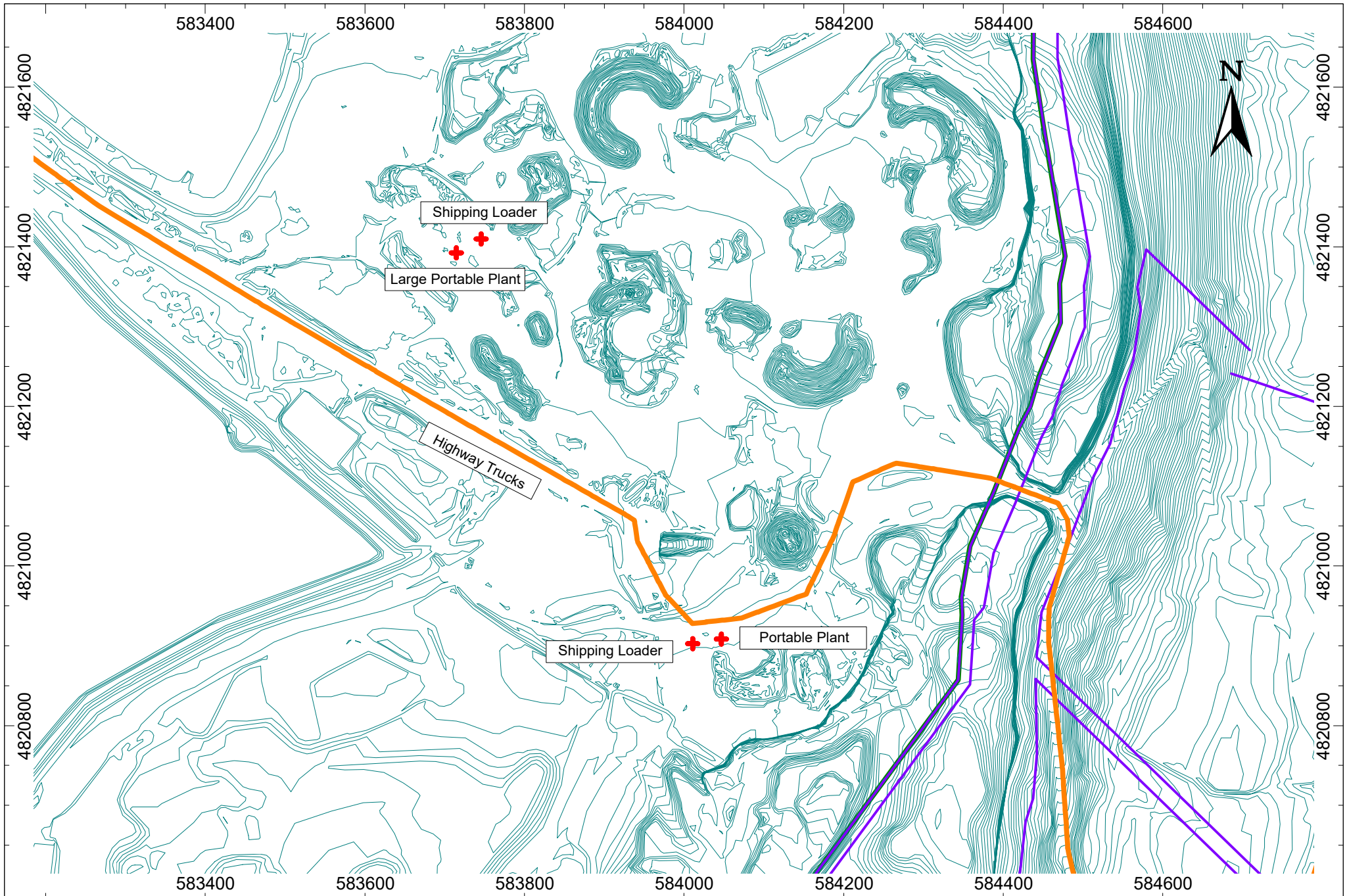
Milton Quarry East Extension


Figure Title

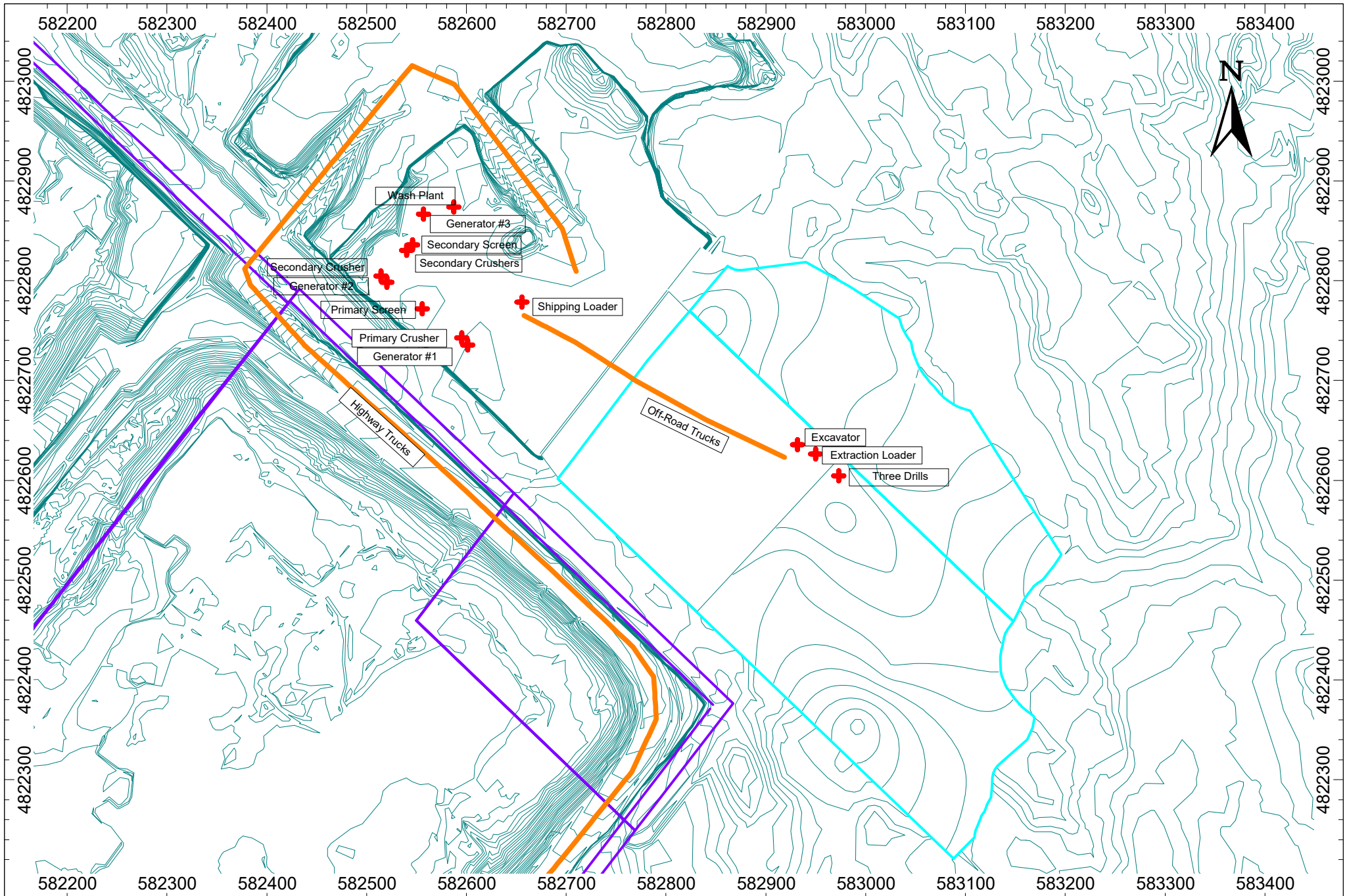
Scenario 2 - Plant Equipment Layout


**Figure 7a**



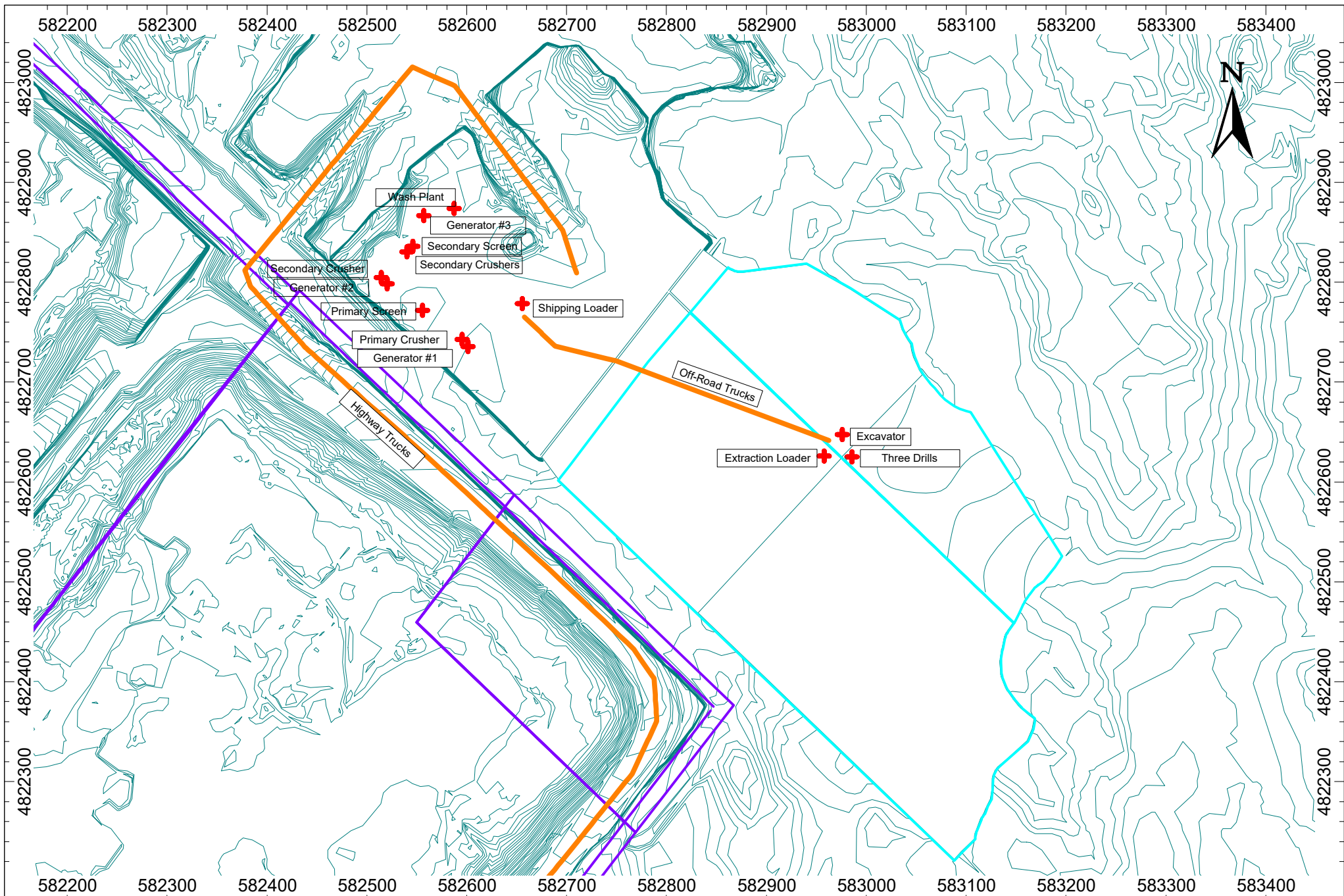


	<b>Project ID:</b> 21004 <b>Project Name</b> Milton Quarry East Extension	<b>Figure Title</b> Scenario 2 - Main Quarry Equipment Layout	<b>Figure 7b</b>
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	<b>Project ID:</b> 21004	<b>Project Name</b> Milton Quarry East Extension	<b>Figure 8</b>
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Project Name

Milton Quarry East Extension

Figure Title

Scenario 2 - Noise Control Implementation - Phase 2



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**Figure 9**

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**Appendix A**  
Noise Control Recommendations

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**General Noise Controls Scenarios 1 and Scenario 2:**

1. The quarry equipment shall satisfy the noise emission levels listed in Table A.

Table A Reference Sound Pressure Levels of Quarry Equipment

Equipment	Reference Sound Pressure Level at 30m (dBA)	Location of Equipment
Rock Drill	85	MQEE
Extraction Loader	76	MQEE
Front-End Loader	76	Main Quarry
Excavator	70	MQEE
Shipment Loader	70 <sup>1</sup>	Main Quarry, Extension
Portable Processing Plant	83	Main Quarry, Extension
Large Portable Processing Plant	87	Main Quarry, Extension
Permanent Processing Plant	72	Main Quarry
Secondary Processing Plant	84	Main Quarry
Sorting Facility	86	Main Quarry
Wash Plant	73	Main Quarry, Extension
Highway Truck	68	Main Quarry, Extension
Off-Road Truck	74	Main Quarry, Extension, MQEE

<sup>1</sup> The shipment loaders were assumed to operate at a 50% duty cycle.

Main Quarry: Main Quarry and North Quarry (Licence ID 5481)

Extension: East and West Cells (Licence ID 608621)

MQEE: Milton Quarry East Extension (Proposed)

**Main Quarry, North Quarry, Milton Quarry Extension and East Extension**

2. New equipment technology or different configurations may allow proposed changes to any portion of the extraction and processing operations including additional equipment to operate on the site, equipment to be substituted, and/or different berm heights, while still meeting the applicable sound level limits. Changes may be permitted to the site operations and noise controls provided that the changes still meet the sound level limits, as confirmed through documentation prepared by a Professional Engineer specializing in noise control.

**Main Quarry and North Quarry**

3. The Large Portable Processing Plant is limited to processing during daytime and evening hours only (07:00 to 23:00).
4. The smaller Portable Processing Plant is limited to processing during daytime hours only (07:00 to 19:00).

5. An acoustic barrier with a minimum elevation of 327 m a.s.l. shall be maintained on the west side of the North Quarry. The barrier shall be located 180 m from the northern edge of the North Quarry and be 100 m in length.
6. Highway Trucks entering the quarry are limited to 200 trucks per hour during the nighttime hours.

Milton Quarry East Extension

7. Drilling operations shall be limited to daytime hours only (07:00 to 19:00).
8. The operation may be carried out in one or more separate lifts. If extraction is carried out in multiple lifts, the first lift shall have a maximum elevation of 325 m a.s.l.
9. The sound emissions of all construction equipment involved in site preparation and rehabilitation activities shall comply with the sound level limits specified in the MECP publication NPC-115 “Construction Equipment”.

**Noise Controls for Scenario 1:**

10. The extraction, processing and shipping equipment operating in the quarry is limited to:

*Milton Quarry East Extension*

- Three (3) Rock Drills
- Two (2) Extraction Loaders
- One (1) Excavator
- 24 Off-Road truck trips/hr (48 passes/hr)

*Main Quarry and North Quarry*

- Seven (7) Shipment Loaders
- One (1) Portable Processing Plant
- One (1) Large Portable Processing Plant
- Two (2) Front-End Loaders
- One (1) Permanent Processing Plant (underground)
- One (1) Secondary Processing Plant
- One (1) Sorting Facility
- One (1) Wash Plant
- 168 Highway truck trips/hr (336 passes/hr)
- 24 Off-Road truck trips/hr (48 passes/hr)

*Main Quarry Extension (East and West Cells)*

- 24 Off-Road truck trips/hr (48 passes/hr)

**Main Quarry and North Quarry**

11. An acoustic barrier with a minimum height of 3 m should be maintained or constructed on the north and west sides of each truck ramp and each truck route that is elevated above the quarry floors as outlined in the Milton Quarry Extension Project Addendum to Noise Impact Assessment January 23, 2007.

12. Screen decks of the sorting facility are to be installed with rubber or polymer screens that result in a 4 dB reduction in sound power.

**Milton Quarry Extension (East and West Cells)**

13. An acoustic barrier with a minimum height of 3 m should be maintained or constructed on the north and west sides of each truck ramp and each truck route that is elevated above the quarry floors as outlined in the Milton Quarry Extension Project Addendum to Noise Impact Assessment January 23, 2007.

**Phase 1**

Milton Quarry East Extension

14. Drilling in the Phase 1 “restricted drilling area” indicated on the operational plan is limited to two (2) rock drills operating simultaneously for the first lift only.
15. Drilling in the Phase 1 “single drill area” indicated the operational plan is limited to one (1) rock drill for the first lift only. Two drills can be used simultaneously in this area on the first lift if a 3 m acoustic barrier is constructed to block line of sight between any drills and R17.

**Phase 2**

No additional Noise Controls.



**Noise Controls for Scenario 2:**

10. The extraction, processing and shipping equipment operating in the quarry is limited to:

*Milton Quarry East Extension*

- Three (3) Rock Drills
- Two (2) Extraction Loaders
- One (1) Excavator
- 32 Off-Road truck trips/hr (64 passes/hr)

*Milton Quarry Extension (East and West Cells)*

- One (1) Portable Processing Plant
- One (1) Wash Plant
- Five (5) Shipment Loaders
- 168 Highway truck trips/hr (336 passes/hr)
- 32 Off-Road truck trips/hr (64 passes/hr)

*Main Quarry and North Quarry*

- One (1) Portable Processing Plant
- One (1) Large Portable Processing Plant
- Two (2) Front-End Loaders
- Two (2) Shipment Loaders
- 168 Highway truck trips/hr (336 passes/hr)

**Phase 1 and Phase 2**

No additional Noise Controls

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**Appendix B**  
Sample of Stationary Noise Calculations

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Receiver: R1  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	36

Receiver Name	Receiver ID	X	Y	Z
R1	R1	583999.2 m	4824077.9 m	307.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	79.7	0.0	-2.0	6.8	5.2	0.0	0.0	0.0	0.0	0.0	23
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	79.6	0.0	-0.8	5.8	6.7	0.0	0.0	0.0	0.0	0.0	33
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	81.0	0.0	-2.3	7.1	10.0	0.0	0.0	0.0	0.0	0.0	24
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	80.7	0.0	-2.3	7.1	7.6	0.0	0.0	0.0	0.0	0.0	16
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	80.3	0.0	-2.3	7.9	9.0	0.0	0.0	0.0	0.0	0.0	27
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	76.2	0.0	-1.3	15.4	8.8	0.0	0.0	0.0	0.0	0.0	28
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	80.3	0.0	-1.9	6.7	9.3	0.0	0.0	0.0	0.0	0.0	29
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	78.7	0.0	-1.5	6.3	8.3	0.0	0.0	0.0	0.0	0.0	19

Receiver: R2  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	37

Receiver Name	Receiver ID	X	Y	Z
R2	R2	584287.2 m	4824076. m	273.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	79.8	0.0	0.0	4.8	5.3	0.0	0.0	0.0	0.0	0.0	0.0	23
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	79.8	0.0	1.6	3.2	6.8	0.0	0.0	0.0	0.0	0.0	0.0	33
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	81.0	0.0	0.6	4.2	10.0	0.0	0.0	0.0	0.0	0.0	0.0	24
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	80.7	0.0	0.5	4.2	7.7	0.0	0.0	0.0	0.0	0.0	0.0	16
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	80.3	0.0	0.7	4.1	9.0	0.0	0.0	0.0	0.0	0.0	0.0	27
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	77.0	0.0	-0.2	8.7	9.4	0.0	0.0	0.0	0.0	0.0	0.0	32
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	80.2	0.0	0.9	3.9	9.2	0.0	0.0	0.0	0.0	0.0	0.0	29
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	78.7	0.0	1.6	3.3	8.3	0.0	0.0	0.0	0.0	0.0	0.0	19

Receiver: R3  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	41

Receiver Name	Receiver ID	X	Y	Z
R3	R3	584612.2 m	4823315.9 m	265.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	77.5	0.0	-2.4	9.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0	24
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	76.5	0.0	-1.5	17.5	7.8	0.0	0.0	0.0	0.0	0.0	0.0	16
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	77.5	0.0	-1.7	7.2	5.8	0.0	0.0	0.0	0.0	0.0	0.0	35
Dumping	Pit Truck Dumping	583959.1	4821034.4	305.9	0	117	0.0	A	78.5	0.0	-2.6	7.4	6.5	0.0	0.0	0.0	0.0	0.0	0.0	16
Dumping	Pit Truck Dumping	583959.7	4821019.7	306.0	0	117	0.0	A	78.6	0.0	-2.4	7.1	6.6	0.0	0.0	0.0	0.0	0.0	0.0	16
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	78.9	0.0	-2.5	7.9	8.5	0.0	0.0	0.0	0.0	0.0	0.0	28
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	78.5	0.0	-2.6	7.4	6.5	0.0	0.0	0.0	0.0	0.0	0.0	19
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	77.9	0.0	-2.4	11.2	7.3	0.0	0.0	0.0	0.0	0.0	0.0	28
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	76.1	0.0	-1.4	7.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	37
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	77.7	0.0	-1.5	6.3	7.5	0.0	0.0	0.0	0.0	0.0	0.0	34
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	75.8	0.0	-1.7	6.7	6.9	0.0	0.0	0.0	0.0	0.0	0.0	23

Receiver: R4  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	42

Receiver Name	Receiver ID	X	Y	Z
R4	R4	584751.7 m	4822086.2 m	263.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	72.3	0.0	-2.6	22.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585236.0	4821102.6	234.8	0	81	14.8	A	71.8	0.0	1.1	4.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585116.4	4821042.4	237.8	0	81	13.3	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584853.3	4820824.2	249.5	0	81	14.2	A	73.1	0.0	1.1	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584807.1	4820671.9	250.5	0	81	14.7	A	74.0	0.0	1.2	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584798.5	4820643.7	250.9	0	81	14.7	A	74.2	0.0	1.2	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585055.8	4821022.6	239.9	0	81	12.4	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584841.1	4820784.2	249.8	0	81	13.7	A	73.3	0.0	1.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585353.9	4821172.6	233.5	0	81	12.1	A	71.8	0.0	1.1	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585032.9	4821015.1	241.1	0	81	11.8	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585013.4	4821008.7	242.1	0	81	11.7	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585312.1	4821149.7	233.5	0	81	11.2	A	71.8	0.0	1.1	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584827.3	4820738.6	249.9	0	81	12.9	A	73.6	0.0	1.2	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	585082.6	4821031.3	238.7	0	81	11.1	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585184.6	4821071.1	236.1	0	81	11.0	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585163.0	4821059.0	236.5	0	81	11.0	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585341.6	4821166.8	233.5	0	81	10.4	A	71.8	0.0	1.1	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	585071.2	4821027.6	239.2	0	81	10.4	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	15
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	72.9	0.0	-2.4	20.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0	29
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	73.7	0.0	-2.8	20.8	5.6	0.0	0.0	0.0	0.0	0.0	0.0	23
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	73.4	0.0	-2.9	18.1	4.3	0.0	0.0	0.0	0.0	0.0	0.0	16
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	72.2	0.0	-2.5	22.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0	25
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	76.3	0.0	-2.0	7.3	8.9	0.0	0.0	0.0	0.0	0.0	0.0	37
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	71.3	0.0	-0.9	9.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	39

Receiver: R5  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	38

Receiver Name	Receiver ID	X	Y	Z
R5	R5	584832.2 m	4821645.9 m	250.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	71.2	0.0	-2.6	24.7	2.8	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585236.0	4821102.6	234.8	0	81	14.8	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	585116.4	4821042.4	237.8	0	81	13.3	A	67.5	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584874.4	4820893.8	248.5	0	81	14.1	A	68.5	0.0	1.0	4.1	2.7	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585203.9	4821082.7	235.5	0	81	12.6	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584853.3	4820824.2	249.5	0	81	14.2	A	69.3	0.0	1.0	4.1	2.9	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585055.8	4821022.6	239.9	0	81	12.4	A	67.4	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584895.4	4820938.5	247.9	0	81	12.9	A	68.0	0.0	0.9	4.1	2.6	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585280.6	4821130.2	233.9	0	81	12.3	A	67.7	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585032.9	4821015.1	241.1	0	81	11.8	A	67.4	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585013.4	4821008.7	242.1	0	81	11.7	A	67.4	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585353.9	4821172.6	233.5	0	81	12.1	A	68.0	0.0	0.9	4.1	2.6	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584841.1	4820784.2	249.8	0	81	13.7	A	69.7	0.0	1.0	4.1	3.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584807.1	4820671.9	250.5	0	81	14.7	A	70.8	0.0	1.0	4.0	3.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584862.1	4820853.1	248.9	0	81	12.9	A	69.0	0.0	1.0	4.1	2.8	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584798.5	4820643.7	250.9	0	81	14.7	A	71.0	0.0	1.0	4.0	3.4	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584982.1	4820998.4	243.9	0	81	11.3	A	67.5	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585082.6	4821031.3	238.7	0	81	11.1	A	67.4	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585312.1	4821149.7	233.5	0	81	11.2	A	67.8	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585000.5	4821004.4	242.9	0	81	10.9	A	67.4	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585184.6	4821071.1	236.1	0	81	11.0	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585163.0	4821059.0	236.5	0	81	11.0	A	67.6	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	585150.3	4821053.5	236.8	0	81	10.8	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585071.2	4821027.6	239.2	0	81	10.4	A	67.4	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584882.1	4820915.7	248.2	0	81	11.2	A	68.3	0.0	0.9	4.1	2.7	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584827.3	4820738.6	249.9	0	81	12.9	A	70.2	0.0	1.0	4.0	3.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585341.6	4821166.8	233.5	0	81	10.4	A	67.9	0.0	0.9	4.1	2.6	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585140.1	4821050.2	237.1	0	81	9.7	A	67.5	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584477.8	4821061.7	304.7	0	81	9.8	A	67.7	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585252.9	4821113.1	234.5	0	81	9.8	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584481.2	4821051.3	303.8	0	81	9.9	A	67.8	0.0	0.9	4.8	2.6	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	585299.0	4821141.6	233.5	0	81	9.8	A	67.7	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585329.5	4821160.5	233.5	0	81	9.9	A	67.8	0.0	0.9	4.1	2.6	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584887.1	4820926.4	247.9	0	81	10.1	A	68.2	0.0	0.9	4.1	2.6	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585172.4	4821064.2	236.5	0	81	9.5	A	67.6	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585219.5	4821092.4	235.3	0	81	9.4	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585092.6	4821034.6	238.5	0	81	9.2	A	67.5	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584457.9	4820897.0	292.9	0	81	11.1	A	69.5	0.0	1.0	4.1	3.0	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	585291.4	4821136.9	233.5	0	81	9.2	A	67.7	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584942.1	4820981.7	246.3	0	81	9.0	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584468.1	4821076.1	305.7	0	81	8.9	A	67.6	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584916.7	4820962.1	247.2	0	81	9.0	A	67.8	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584948.8	4820985.3	245.8	0	81	8.7	A	67.5	0.0	0.9	4.1	2.5	0.0	0.0	0.0	0.0	0.0	15

Receiver: R5  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	38

Receiver Name	Receiver ID	X	Y	Z
R5	R5	584832.2 m	4821645.9 m	250.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Highway	Highway trucks onto property	584471.7	4821070.7	305.2	0	81	7.1	A	67.7	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584623.2	4820498.1	260.1	0	81	11.3	A	72.3	0.0	1.1	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584529.2	4820544.7	266.9	0	81	11.0	A	72.2	0.0	1.1	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584498.9	4820589.1	271.0	0	81	10.7	A	71.9	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	15
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	72.2	0.0	-2.4	18.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	32
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	71.7	0.0	-2.6	22.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0	24
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	71.6	0.0	-2.8	21.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0	15
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	70.2	0.0	-2.3	26.9	3.6	0.0	0.0	0.0	0.0	0.0	0.0	23
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	77.3	0.0	-2.2	14.8	9.6	0.0	0.0	0.0	0.0	0.0	0.0	28
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	68.4	0.0	-0.6	21.4	3.3	0.0	0.0	0.0	0.0	0.0	0.0	31
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	68.7	0.0	-1.9	22.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	17



Receiver: R6  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	39

Receiver Name	Receiver ID	X	Y	Z
R6	R6	584900.2 m	4821584.9 m	247.0 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	71.6	0.0	-0.2	21.9	2.9	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585236.0	4821102.6	234.8	0	81	14.8	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585116.4	4821042.4	237.8	0	81	13.3	A	66.3	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584874.4	4820893.8	248.5	0	81	14.1	A	67.8	0.0	3.0	2.8	2.6	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585203.9	4821082.7	235.5	0	81	12.6	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585055.8	4821022.6	239.9	0	81	12.4	A	66.3	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585280.6	4821130.2	233.9	0	81	12.3	A	66.5	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584895.4	4820938.5	247.9	0	81	12.9	A	67.2	0.0	2.9	2.9	2.4	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584853.3	4820824.2	249.5	0	81	14.2	A	68.6	0.0	3.1	2.8	2.8	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585032.9	4821015.1	241.1	0	81	11.8	A	66.3	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585013.4	4821008.7	242.1	0	81	11.7	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585353.9	4821172.6	233.5	0	81	12.1	A	66.8	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584982.1	4820998.4	243.9	0	81	11.3	A	66.4	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585082.6	4821031.3	238.7	0	81	11.1	A	66.3	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584862.1	4820853.1	248.9	0	81	12.9	A	68.3	0.0	3.0	2.8	2.7	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585312.1	4821149.7	233.5	0	81	11.2	A	66.6	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584841.1	4820784.2	249.8	0	81	13.7	A	69.1	0.0	3.1	2.8	2.9	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585184.6	4821071.1	236.1	0	81	11.0	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584807.1	4820671.9	250.5	0	81	14.7	A	70.3	0.0	3.2	2.7	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585163.0	4821059.0	236.5	0	81	11.0	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585000.5	4821004.4	242.9	0	81	10.9	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585150.3	4821053.5	236.8	0	81	10.8	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584798.5	4820643.7	250.9	0	81	14.7	A	70.5	0.0	3.2	2.7	3.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585071.2	4821027.6	239.2	0	81	10.4	A	66.3	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584882.1	4820915.7	248.2	0	81	11.2	A	67.5	0.0	3.0	2.8	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585341.6	4821166.8	233.5	0	81	10.4	A	66.7	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584827.3	4820738.6	249.9	0	81	12.9	A	69.6	0.0	3.1	2.8	3.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585252.9	4821113.1	234.5	0	81	9.8	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585140.1	4821050.2	237.1	0	81	9.7	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585299.0	4821141.6	233.5	0	81	9.8	A	66.5	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585329.5	4821160.5	233.5	0	81	9.9	A	66.6	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585172.4	4821064.2	236.5	0	81	9.5	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585219.5	4821092.4	235.3	0	81	9.4	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585092.6	4821034.6	238.5	0	81	9.2	A	66.3	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584887.1	4820926.4	247.9	0	81	10.1	A	67.4	0.0	2.9	2.9	2.5	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585291.4	4821136.9	233.5	0	81	9.2	A	66.5	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584479.1	4821023.8	302.2	0	81	10.3	A	67.9	0.0	3.0	3.1	2.6	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584470.6	4820994.0	299.9	0	81	10.6	A	68.3	0.0	3.0	2.8	2.7	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584942.1	4820981.7	246.3	0	81	9.0	A	66.6	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584477.8	4821061.7	304.7	0	81	9.8	A	67.6	0.0	3.0	2.9	2.5	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584916.7	4820962.1	247.2	0	81	9.0	A	66.9	0.0	2.9	2.9	2.4	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585193.1	4821076.0	235.8	0	81	8.5	A	66.4	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584867.1	4820869.8	248.5	0	81	10.1	A	68.1	0.0	3.0	2.8	2.6	0.0	0.0	0.0	0.0	0.0	15

Receiver: R6  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	39

Receiver Name	Receiver ID	X	Y	Z
R6	R6	584900.2 m	4821584.9 m	247.0 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	584948.8	4820985.3	245.8	0	81	8.7	A	66.6	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	585259.7	4821117.3	234.5	0	81	8.1	A	66.4	0.0	2.9	2.9	2.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	585043.1	4821018.4	240.6	0	81	7.9	A	66.3	0.0	2.9	2.9	2.2	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584468.1	4821076.1	305.7	0	81	8.9	A	67.5	0.0	3.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584460.7	4820870.5	291.0	0	81	10.5	A	69.5	0.0	3.1	0.0	3.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584467.3	4820809.9	287.0	0	81	10.8	A	70.0	0.0	3.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584476.7	4820710.5	280.0	0	81	11.5	A	70.8	0.0	3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584462.2	4820856.9	290.0	0	81	10.3	A	69.6	0.0	3.1	0.0	3.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584474.7	4820739.6	281.9	0	81	10.9	A	70.5	0.0	3.2	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584478.5	4820682.6	278.0	0	81	11.3	A	71.0	0.0	3.3	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584465.4	4820827.4	288.0	0	81	9.8	A	69.8	0.0	3.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	15
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	72.6	0.0	-0.2	15.6	4.0	0.0	0.0	0.0	0.0	0.0	32
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	71.8	0.0	-0.5	18.6	4.7	0.0	0.0	0.0	0.0	0.0	26
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	71.8	0.0	0.1	17.8	3.7	0.0	0.0	0.0	0.0	0.0	16
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	70.5	0.0	-0.1	24.3	3.7	0.0	0.0	0.0	0.0	0.0	23
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	77.7	0.0	-0.9	10.7	9.9	0.0	0.0	0.0	0.0	0.0	30
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	68.6	0.0	1.2	19.1	3.4	0.0	0.0	0.0	0.0	0.0	31
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	69.4	0.0	0.1	18.1	4.4	0.0	0.0	0.0	0.0	0.0	18

Receiver: R7  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R7	R7	585398.2 m	4820928.9 m	232.8 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	75.1	0.0	-2.1	18.5	3.7	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585236.0	4821102.6	234.8	0	81	14.8	A	58.5	0.0	0.7	0.0	1.1	4.1	0.0	0.0	0.0	0.0	32
Highway	Highway trucks onto property	585280.6	4821130.2	233.9	0	81	12.3	A	58.4	0.0	0.7	0.0	1.1	4.5	0.0	0.0	0.0	0.0	29
Highway	Highway trucks onto property	585203.9	4821082.7	235.5	0	81	12.6	A	58.9	0.0	0.7	0.0	1.1	4.1	0.0	0.0	0.0	0.0	29
Highway	Highway trucks onto property	585353.9	4821172.6	233.5	0	81	12.1	A	58.9	0.0	0.7	0.0	1.1	5.9	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585116.4	4821042.4	237.8	0	81	13.3	A	60.7	0.0	0.8	0.0	1.3	5.3	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585312.1	4821149.7	233.5	0	81	11.2	A	58.5	0.0	0.7	0.0	1.1	4.9	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585184.6	4821071.1	236.1	0	81	11.0	A	59.2	0.0	0.8	0.0	1.2	4.3	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585341.6	4821166.8	233.5	0	81	10.4	A	58.8	0.0	0.7	0.0	1.1	5.7	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585163.0	4821059.0	236.5	0	81	11.0	A	59.6	0.0	0.8	0.0	1.2	4.6	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585299.0	4821141.6	233.5	0	81	9.8	A	58.4	0.0	0.7	0.0	1.1	4.7	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585252.9	4821113.1	234.5	0	81	9.8	A	58.4	0.0	0.7	0.0	1.1	4.1	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585329.5	4821160.5	233.5	0	81	9.9	A	58.7	0.0	0.7	0.0	1.1	5.3	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585150.3	4821053.5	236.8	0	81	10.8	A	59.9	0.0	0.8	0.0	1.2	4.8	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585291.4	4821136.9	233.5	0	81	9.2	A	58.4	0.0	0.7	0.0	1.1	4.6	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585219.5	4821092.4	235.3	0	81	9.4	A	58.7	0.0	0.7	0.0	1.1	4.1	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585055.8	4821022.6	239.9	0	81	12.4	A	62.0	0.0	0.8	0.0	1.5	4.5	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	585172.4	4821064.2	236.5	0	81	9.5	A	59.4	0.0	0.8	0.0	1.2	4.5	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	585082.6	4821031.3	238.7	0	81	11.1	A	61.4	0.0	0.8	0.0	1.4	5.8	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	585140.1	4821050.2	237.1	0	81	9.7	A	60.1	0.0	0.8	0.0	1.3	5.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	585259.7	4821117.3	234.5	0	81	8.1	A	58.4	0.0	0.7	0.0	1.1	4.2	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	585193.1	4821076.0	235.8	0	81	8.5	A	59.0	0.0	0.8	0.0	1.1	4.1	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	585032.9	4821015.1	241.1	0	81	11.8	A	62.5	0.0	0.8	0.0	1.6	1.6	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585013.4	4821008.7	242.1	0	81	11.7	A	62.9	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	585071.2	4821027.6	239.2	0	81	10.4	A	61.7	0.0	0.8	0.0	1.5	5.4	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584874.4	4820893.8	248.5	0	81	14.1	A	65.4	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	584853.3	4820824.2	249.5	0	81	14.2	A	65.9	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585267.8	4821122.3	234.5	0	81	6.6	A	58.4	0.0	0.7	0.0	1.1	4.3	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	585213.7	4821088.8	235.5	0	81	6.9	A	58.8	0.0	0.7	0.0	1.1	4.1	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	585319.7	4821154.5	233.5	0	81	6.7	A	58.6	0.0	0.7	0.0	1.1	5.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	585092.6	4821034.6	238.5	0	81	9.2	A	61.2	0.0	0.8	0.0	1.4	5.7	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584895.4	4820938.5	247.9	0	81	12.9	A	65.0	0.0	0.9	0.0	2.0	2.1	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584982.1	4820998.4	243.9	0	81	11.3	A	63.5	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585000.5	4821004.4	242.9	0	81	10.9	A	63.1	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	585323.5	4821156.8	233.5	0	81	6.4	A	58.6	0.0	0.7	0.0	1.1	5.1	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585264.1	4821120.0	234.5	0	81	6.0	A	58.4	0.0	0.7	0.0	1.1	4.3	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584807.1	4820671.9	250.5	0	81	14.7	A	67.2	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	584841.1	4820784.2	249.8	0	81	13.7	A	66.2	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585304.8	4821145.2	233.5	0	81	5.9	A	58.4	0.0	0.7	0.0	1.1	4.8	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584798.5	4820643.7	250.9	0	81	14.7	A	67.4	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	584862.1	4820853.1	248.9	0	81	12.9	A	65.7	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	585335.1	4821163.8	233.5	0	81	5.2	A	58.7	0.0	0.7	0.0	1.1	5.6	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584827.3	4820738.6	249.9	0	81	12.9	A	66.6	0.0	0.9	4.1	2.3	0.0	0.0	0.0	0.0	0.0	21

Receiver: R7  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R7	R7	585398.2 m	4820928.9 m	232.8 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	585128.7	4821046.4	237.5	0	81	6.6	A	60.4	0.0	0.8	0.0	1.3	5.1	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584882.1	4820915.7	248.2	0	81	11.2	A	65.3	0.0	0.9	0.0	2.0	1.3	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	585100.3	4821037.2	238.3	0	81	7.0	A	61.0	0.0	0.8	0.0	1.4	5.6	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585270.9	4821124.2	234.4	0	81	4.3	A	58.4	0.0	0.7	0.0	1.1	4.4	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	585177.7	4821067.2	236.4	0	81	5.1	A	59.3	0.0	0.8	0.0	1.2	4.4	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	585043.1	4821018.4	240.6	0	81	7.9	A	62.3	0.0	0.8	0.0	1.5	2.9	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584887.1	4820926.4	247.9	0	81	10.1	A	65.2	0.0	0.9	0.0	2.0	1.9	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585104.5	4821038.5	238.1	0	81	5.8	A	60.9	0.0	0.8	0.0	1.4	5.5	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584942.1	4820981.7	246.3	0	81	9.0	A	64.2	0.0	0.8	0.0	1.8	3.2	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584817.0	4820704.7	250.0	0	81	11.5	A	66.9	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584867.1	4820869.8	248.5	0	81	10.1	A	65.6	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584948.8	4820985.3	245.8	0	81	8.7	A	64.1	0.0	0.8	0.0	1.8	2.8	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584832.5	4820755.8	250.3	0	81	10.9	A	66.4	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584916.7	4820962.1	247.2	0	81	9.0	A	64.7	0.0	0.9	0.0	1.9	3.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585132.1	4821047.6	237.5	0	81	4.2	A	60.3	0.0	0.8	0.0	1.3	5.1	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585134.5	4821048.4	237.3	0	81	4.0	A	60.2	0.0	0.8	0.0	1.3	5.1	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585022.5	4821011.7	241.6	0	81	6.4	A	62.7	0.0	0.8	0.0	1.6	1.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584921.8	4820967.3	246.8	0	81	8.2	A	64.6	0.0	0.8	0.0	1.9	3.4	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584835.7	4820766.4	250.2	0	81	10.0	A	66.4	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584746.7	4820545.5	253.5	0	81	12.1	A	68.6	0.0	1.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584787.9	4820608.7	251.5	0	81	11.3	A	67.8	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584992.5	4821001.8	243.4	0	81	6.7	A	63.3	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585272.7	4821125.3	234.3	0	81	1.7	A	58.4	0.0	0.7	0.0	1.1	4.4	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584791.6	4820620.9	251.5	0	81	10.8	A	67.7	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584965.8	4820993.1	244.7	0	81	7.0	A	63.8	0.0	0.8	0.0	1.8	1.4	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584927.1	4820972.7	246.5	0	81	7.6	A	64.5	0.0	0.8	0.0	1.9	2.9	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584784.1	4820596.4	251.8	0	81	10.9	A	67.9	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584869.6	4820878.1	248.5	0	81	8.4	A	65.5	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584911.9	4820957.2	247.5	0	81	7.5	A	64.8	0.0	0.9	0.0	1.9	2.7	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584779.0	4820585.7	252.2	0	81	10.7	A	68.0	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584908.0	4820953.2	247.6	0	81	7.4	A	64.8	0.0	0.9	0.0	1.9	2.6	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584812.7	4820690.4	250.5	0	81	9.6	A	67.0	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584961.4	4820991.6	245.2	0	81	6.3	A	63.9	0.0	0.8	0.0	1.8	1.7	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584768.8	4820571.1	252.5	0	81	10.6	A	68.2	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585156.8	4821055.7	236.5	0	81	2.1	A	59.7	0.0	0.8	0.0	1.2	4.7	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584935.1	4820977.9	246.5	0	81	6.6	A	64.4	0.0	0.8	0.0	1.9	3.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584931.1	4820975.8	246.5	0	81	6.6	A	64.4	0.0	0.8	0.0	1.9	3.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584757.6	4820557.6	253.3	0	81	10.3	A	68.4	0.0	1.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584969.8	4820994.4	244.5	0	81	5.5	A	63.7	0.0	0.8	0.0	1.8	1.2	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584973.2	4820995.5	244.5	0	81	5.5	A	63.7	0.0	0.8	0.0	1.8	1.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584820.0	4820714.7	249.5	0	81	8.4	A	66.8	0.0	0.9	4.1	2.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584953.6	4820987.9	245.5	0	81	5.5	A	64.0	0.0	0.8	0.0	1.8	2.3	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584858.4	4820841.2	249.2	0	81	7.2	A	65.8	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20

Receiver: R7  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R7	R7	585398.2 m	4820928.9 m	232.8 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	584623.2	4820498.1	260.1	0	81	11.3	A	70.0	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585065.1	4821025.6	239.5	0	81	2.8	A	61.8	0.0	0.8	0.0	1.5	5.2	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584476.7	4820710.5	280.0	0	81	11.5	A	70.5	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584847.5	4820805.1	249.5	0	81	6.9	A	66.0	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584822.6	4820723.0	249.5	0	81	7.6	A	66.7	0.0	0.9	4.1	2.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584738.3	4820536.2	253.9	0	81	9.5	A	68.7	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584902.7	4820947.5	247.8	0	81	5.8	A	64.9	0.0	0.9	0.0	2.0	2.3	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584714.9	4820519.5	255.1	0	81	9.8	A	69.0	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584478.5	4820682.6	278.0	0	81	11.3	A	70.6	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584480.2	4820657.7	276.0	0	81	11.2	A	70.6	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584457.9	4820897.0	292.9	0	81	11.1	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584529.2	4820544.7	266.9	0	81	11.0	A	70.6	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584467.3	4820809.9	287.0	0	81	10.8	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584474.7	4820739.6	281.9	0	81	10.9	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584848.8	4820809.5	249.5	0	81	6.3	A	66.0	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584674.5	4820502.9	257.3	0	81	9.7	A	69.5	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584470.6	4820994.0	299.9	0	81	10.6	A	70.4	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584722.2	4820524.3	254.8	0	81	9.0	A	68.9	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584479.1	4821023.8	302.2	0	81	10.3	A	70.3	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584460.7	4820870.5	291.0	0	81	10.5	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584498.9	4820589.1	271.0	0	81	10.7	A	70.7	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584763.4	4820564.0	252.8	0	81	8.2	A	68.3	0.0	0.9	0.0	2.7	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584466.8	4820980.4	298.9	0	81	10.3	A	70.4	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584706.5	4820514.1	255.5	0	81	9.0	A	69.1	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584462.2	4820856.9	290.0	0	81	10.3	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584550.8	4820525.8	264.9	0	81	10.3	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584958.3	4820990.4	245.4	0	81	3.8	A	64.0	0.0	0.8	0.0	1.8	1.9	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584462.5	4820965.0	297.9	0	81	10.3	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585046.8	4821019.6	240.4	0	81	2.0	A	62.2	0.0	0.8	0.0	1.5	3.4	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584563.8	4820516.6	263.8	0	81	10.1	A	70.4	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584473.3	4820755.2	283.0	0	81	10.2	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584577.2	4820509.8	262.8	0	81	10.0	A	70.3	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584956.2	4820989.3	245.5	0	81	3.6	A	64.0	0.0	0.8	0.0	1.8	2.1	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584989.3	4821000.8	243.5	0	81	3.0	A	63.4	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584475.2	4821010.1	301.2	0	81	9.9	A	70.4	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584487.3	4820617.7	273.1	0	81	10.2	A	70.7	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584660.8	4820499.2	257.9	0	81	9.1	A	69.6	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584638.4	4820498.1	259.3	0	81	9.2	A	69.8	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584465.4	4820827.4	288.0	0	81	9.8	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584485.0	4820627.7	273.9	0	81	9.9	A	70.7	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584469.0	4820794.2	285.8	0	81	9.7	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584470.4	4820781.7	284.8	0	81	9.2	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584459.6	4820880.6	291.5	0	81	9.2	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	16

Receiver: R7  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R7	R7	585398.2 m	4820928.9 m	232.8 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	584681.9	4820504.9	256.8	0	81	7.8	A	69.4	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584865.3	4820863.7	248.5	0	81	3.9	A	65.6	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584479.5	4820668.2	276.6	0	81	8.9	A	70.6	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584694.1	4820508.2	256.2	0	81	7.5	A	69.3	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584471.3	4820773.0	284.2	0	81	8.7	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584457.4	4820943.4	296.2	0	81	8.6	A	70.5	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584727.5	4820527.8	254.5	0	81	6.9	A	68.9	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584475.9	4820722.5	280.5	0	81	8.5	A	70.5	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584600.8	4820502.2	261.3	0	81	8.1	A	70.1	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	585025.1	4821012.5	241.5	0	81	0.6	A	62.7	0.0	0.8	0.0	1.6	1.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584506.4	4820574.7	269.7	0	81	8.6	A	70.6	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584520.9	4820554.2	267.7	0	81	8.5	A	70.6	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584481.8	4821033.7	302.7	0	81	8.2	A	70.3	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584846.4	4820801.4	249.5	0	81	3.9	A	66.1	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584645.4	4820498.1	258.8	0	81	7.6	A	69.8	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584540.4	4820533.1	265.9	0	81	8.3	A	70.5	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584589.1	4820505.9	262.0	0	81	8.0	A	70.2	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584667.4	4820501.0	257.5	0	81	7.3	A	69.6	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584878.5	4820907.1	248.5	0	81	3.1	A	65.3	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584814.4	4820696.1	250.5	0	81	4.6	A	67.0	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584844.8	4820796.4	249.5	0	81	3.5	A	66.1	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584857.4	4820837.7	249.4	0	81	3.0	A	65.8	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584773.1	4820577.2	252.5	0	81	5.3	A	68.1	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584879.0	4820908.9	248.5	0	81	2.4	A	65.3	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584837.5	4820772.1	250.2	0	81	3.2	A	66.3	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584830.4	4820749.0	250.4	0	81	3.3	A	66.5	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584332.5	4821110.5	308.5	0	82	13.7	A	71.7	0.0	-0.8	5.5	3.6	0.0	0.0	0.0	0.0	0.0	16
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	75.8	0.0	-1.6	10.7	5.2	0.0	0.0	0.0	0.0	0.0	34
Dumping	Pit Truck Dumping	583959.7	4821019.7	306.0	0	117	0.0	A	74.2	0.0	-2.0	8.3	4.5	0.0	0.0	0.0	0.0	0.0	21
Dumping	Pit Truck Dumping	583959.1	4821034.4	305.9	0	117	0.0	A	74.2	0.0	-2.0	12.7	4.5	0.0	0.0	0.0	0.0	0.0	17
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	73.7	0.0	-1.7	12.6	5.6	0.0	0.0	0.0	0.0	0.0	30
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	74.2	0.0	-1.4	11.2	4.5	0.0	0.0	0.0	0.0	0.0	21
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	73.7	0.0	-1.7	6.6	5.0	0.0	0.0	0.0	0.0	0.0	38
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	80.3	0.0	-2.0	6.8	12.1	0.0	0.0	0.0	0.0	0.0	30
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	72.3	0.0	-0.3	5.1	4.7	0.0	0.0	0.0	0.0	0.0	42
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	74.6	0.0	-1.6	8.2	6.4	0.0	0.0	0.0	0.0	0.0	23



Receiver: R8  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R8	R8	585037.2 m	4820341.9 m	244.9 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	74.8	0.0	-2.2	16.0	3.7	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584798.5	4820643.7	250.9	0	81	14.7	A	62.7	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	31
Highway	Highway trucks onto property	584807.1	4820671.9	250.5	0	81	14.7	A	63.1	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	31
Highway	Highway trucks onto property	584746.7	4820545.5	253.5	0	81	12.1	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	29
Highway	Highway trucks onto property	584841.1	4820784.2	249.8	0	81	13.7	A	64.7	0.0	0.9	0.0	1.9	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584853.3	4820824.2	249.5	0	81	14.2	A	65.3	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584787.9	4820608.7	251.5	0	81	11.3	A	62.3	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584827.3	4820738.6	249.9	0	81	12.9	A	64.0	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584784.1	4820596.4	251.8	0	81	10.9	A	62.1	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584779.0	4820585.7	252.2	0	81	10.7	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584768.8	4820571.1	252.5	0	81	10.6	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584791.6	4820620.9	251.5	0	81	10.8	A	62.4	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	28
Highway	Highway trucks onto property	584757.6	4820557.6	253.3	0	81	10.3	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	584874.4	4820893.8	248.5	0	81	14.1	A	66.2	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	584817.0	4820704.7	250.0	0	81	11.5	A	63.6	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	584714.9	4820519.5	255.1	0	81	9.8	A	62.3	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	584623.2	4820498.1	260.1	0	81	11.3	A	63.9	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	584738.3	4820536.2	253.9	0	81	9.5	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
Highway	Highway trucks onto property	584862.1	4820853.1	248.9	0	81	12.9	A	65.7	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	584674.5	4820502.9	257.3	0	81	9.7	A	63.0	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	584722.2	4820524.3	254.8	0	81	9.0	A	62.2	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	584832.5	4820755.8	250.3	0	81	10.9	A	64.3	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	584706.5	4820514.1	255.5	0	81	9.0	A	62.4	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
Highway	Highway trucks onto property	584812.7	4820690.4	250.5	0	81	9.6	A	63.4	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	584763.4	4820564.0	252.8	0	81	8.2	A	61.9	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	584895.4	4820938.5	247.9	0	81	12.9	A	66.8	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	585236.0	4821102.6	234.8	0	81	14.8	A	68.9	0.0	1.0	0.0	2.8	1.4	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584660.8	4820499.2	257.9	0	81	9.1	A	63.2	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
Highway	Highway trucks onto property	584638.4	4820498.1	259.3	0	81	9.2	A	63.6	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584835.7	4820766.4	250.2	0	81	10.0	A	64.4	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	585116.4	4821042.4	237.8	0	81	13.3	A	68.0	0.0	0.9	0.0	2.6	3.2	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584529.2	4820544.7	266.9	0	81	11.0	A	65.8	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584577.2	4820509.8	262.8	0	81	10.0	A	64.8	0.0	0.9	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584563.8	4820516.6	263.8	0	81	10.1	A	65.1	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584550.8	4820525.8	264.9	0	81	10.3	A	65.3	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584681.9	4820504.9	256.8	0	81	7.8	A	62.8	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584694.1	4820508.2	256.2	0	81	7.5	A	62.6	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	585055.8	4821022.6	239.9	0	81	12.4	A	67.7	0.0	0.9	0.0	2.5	1.4	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584882.1	4820915.7	248.2	0	81	11.2	A	66.5	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584727.5	4820527.8	254.5	0	81	6.9	A	62.2	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584820.0	4820714.7	249.9	0	81	8.4	A	63.7	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
Highway	Highway trucks onto property	584867.1	4820869.8	248.5	0	81	10.1	A	65.9	0.0	0.9	4.1	2.1	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585032.9	4821015.1	241.1	0	81	11.8	A	67.6	0.0	0.9	0.0	2.5	1.2	0.0	0.0	0.0	0.0	21

Receiver: R8  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R8	R8	585037.2 m	4820341.9 m	244.9 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	584667.4	4820501.0	257.5	0	81	7.3	A	63.1	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	585013.4	4821008.7	242.1	0	81	11.7	A	67.5	0.0	0.9	0.0	2.5	2.9	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584498.9	4820589.1	271.0	0	81	10.7	A	66.5	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584645.4	4820498.1	258.8	0	81	7.6	A	63.5	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584480.2	4820657.7	276.0	0	81	11.2	A	67.1	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585203.9	4821082.7	235.5	0	81	12.6	A	68.6	0.0	1.0	0.0	2.7	2.2	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584476.7	4820710.5	280.0	0	81	11.5	A	67.5	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584478.5	4820682.6	278.0	0	81	11.3	A	67.3	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584982.1	4820998.4	243.9	0	81	11.3	A	67.4	0.0	0.9	0.0	2.5	3.2	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584822.6	4820723.0	249.5	0	81	7.6	A	63.8	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584600.8	4820502.2	261.3	0	81	8.1	A	64.4	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584686.9	4820506.3	256.5	0	81	6.4	A	62.8	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	23
Highway	Highway trucks onto property	584887.1	4820926.4	247.9	0	81	10.1	A	66.6	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584589.1	4820505.9	262.0	0	81	8.0	A	64.6	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584487.3	4820617.7	273.1	0	81	10.2	A	66.8	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585000.5	4821004.4	242.9	0	81	10.9	A	67.4	0.0	0.9	0.0	2.5	3.2	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584773.1	4820577.2	252.5	0	81	5.3	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585082.6	4821031.3	238.7	0	81	11.1	A	67.8	0.0	0.9	0.0	2.5	1.4	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584701.6	4820510.9	255.7	0	81	5.8	A	62.5	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584474.7	4820739.6	281.9	0	81	10.9	A	67.8	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584485.0	4820627.7	273.9	0	81	9.9	A	66.9	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	585280.6	4821130.2	233.9	0	81	12.3	A	69.3	0.0	1.0	0.0	2.9	1.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584540.4	4820533.1	265.9	0	81	8.3	A	65.5	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584698.4	4820509.4	256.0	0	81	5.3	A	62.6	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	585163.0	4821059.0	236.5	0	81	11.0	A	68.2	0.0	0.9	0.0	2.7	3.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585071.2	4821027.6	239.2	0	81	10.4	A	67.7	0.0	0.9	0.0	2.5	1.4	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585150.3	4821053.5	236.8	0	81	10.8	A	68.2	0.0	0.9	0.0	2.6	3.2	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585184.6	4821071.1	236.1	0	81	11.0	A	68.4	0.0	1.0	0.0	2.7	2.5	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584520.9	4820554.2	267.7	0	81	8.5	A	65.9	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584774.9	4820579.8	252.4	0	81	4.5	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584467.3	4820809.9	287.0	0	81	10.8	A	68.4	0.0	1.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584869.6	4820878.1	248.5	0	81	8.4	A	66.0	0.0	0.9	4.1	2.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584650.2	4820498.1	258.5	0	81	5.8	A	63.4	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584732.4	4820531.0	254.5	0	81	4.5	A	62.1	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	22
Highway	Highway trucks onto property	584473.3	4820755.2	283.0	0	81	10.2	A	67.9	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584506.4	4820574.7	269.7	0	81	8.6	A	66.3	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584611.1	4820498.8	260.7	0	81	6.4	A	64.1	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584557.4	4820521.1	264.3	0	81	7.4	A	65.2	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	585353.9	4821172.6	233.5	0	81	12.1	A	70.0	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584516.5	4820559.3	268.2	0	81	8.1	A	66.0	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584916.7	4820962.1	247.2	0	81	9.0	A	67.0	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584503.2	4820580.9	270.2	0	81	8.4	A	66.4	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584457.9	4820897.0	292.9	0	81	11.1	A	69.1	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	20



Receiver: R8  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R8	R8	585037.2 m	4820341.9 m	244.9 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	584847.5	4820805.1	249.5	0	81	6.9	A	65.0	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584494.3	4820597.9	271.7	0	81	8.5	A	66.6	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584535.8	4820537.1	266.3	0	81	7.4	A	65.6	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584793.8	4820628.2	251.4	0	81	4.3	A	62.5	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	21
Highway	Highway trucks onto property	584584.0	4820507.6	262.3	0	81	6.4	A	64.7	0.0	0.9	0.0	1.9	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584942.1	4820981.7	246.3	0	81	9.0	A	67.2	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584858.4	4820841.2	249.2	0	81	7.2	A	65.5	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584479.5	4820668.2	276.6	0	81	8.9	A	67.2	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585312.1	4821149.7	233.5	0	81	11.2	A	69.6	0.0	1.0	0.0	3.0	1.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584460.7	4820870.5	291.0	0	81	10.5	A	68.9	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585140.1	4821050.2	237.1	0	81	9.7	A	68.1	0.0	0.9	0.0	2.6	3.1	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584462.2	4820856.9	290.0	0	81	10.3	A	68.8	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584823.9	4820727.5	249.5	0	81	5.5	A	63.9	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584469.0	4820794.2	285.8	0	81	9.7	A	68.2	0.0	0.9	0.0	2.7	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584948.8	4820985.3	245.8	0	81	8.7	A	67.3	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584509.5	4820568.8	269.2	0	81	7.5	A	66.2	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585092.6	4821034.6	238.5	0	81	9.2	A	67.8	0.0	0.9	0.0	2.6	1.2	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584465.4	4820827.4	288.0	0	81	9.8	A	68.5	0.0	1.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584848.8	4820809.5	249.5	0	81	6.3	A	65.1	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584655.5	4820498.1	258.2	0	81	4.6	A	63.3	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585172.4	4821064.2	236.5	0	81	9.5	A	68.3	0.0	0.9	0.0	2.7	2.7	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584814.4	4820696.1	250.5	0	81	4.6	A	63.4	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584921.8	4820967.3	246.8	0	81	8.2	A	67.1	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584470.4	4820781.7	284.8	0	81	9.2	A	68.1	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584491.4	4820603.6	272.1	0	81	7.7	A	66.6	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584614.8	4820498.1	260.6	0	81	5.1	A	64.1	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584734.5	4820532.3	254.4	0	81	3.1	A	62.1	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584470.6	4820994.0	299.9	0	81	10.6	A	69.7	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584475.9	4820722.5	280.5	0	81	8.5	A	67.6	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584730.4	4820529.7	254.5	0	81	2.9	A	62.1	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	585252.9	4821113.1	234.5	0	81	9.8	A	69.1	0.0	1.0	0.0	2.9	1.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584462.5	4820965.0	297.9	0	81	10.3	A	69.6	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584632.8	4820498.1	259.5	0	81	4.5	A	63.7	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584482.4	4820639.0	274.5	0	81	7.7	A	67.0	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584512.8	4820563.5	268.7	0	81	6.8	A	66.1	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585219.5	4821092.4	235.3	0	81	9.4	A	68.8	0.0	1.0	0.0	2.8	1.7	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584471.3	4820773.0	284.2	0	81	8.7	A	68.1	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584466.8	4820980.4	298.9	0	81	10.3	A	69.7	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584753.5	4820553.0	253.5	0	81	2.6	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	20
Highway	Highway trucks onto property	584911.9	4820957.2	247.5	0	81	7.5	A	67.0	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585341.6	4821166.8	233.5	0	81	10.4	A	69.9	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584596.2	4820503.6	261.6	0	81	5.0	A	64.4	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584908.0	4820953.2	247.6	0	81	7.4	A	66.9	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	19

Receiver: R8  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R8	R8	585037.2 m	4820341.9 m	244.9 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	584927.1	4820972.7	246.5	0	81	7.6	A	67.1	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584479.1	4821023.8	302.2	0	81	10.3	A	69.9	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584605.2	4820500.7	261.1	0	81	4.7	A	64.3	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585299.0	4821141.6	233.5	0	81	9.8	A	69.5	0.0	1.0	0.0	3.0	1.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585043.1	4821018.4	240.6	0	81	7.9	A	67.6	0.0	0.9	0.0	2.5	1.3	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584459.6	4820880.6	291.5	0	81	9.2	A	69.0	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585329.5	4821160.5	233.5	0	81	9.9	A	69.8	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584821.4	4820719.1	249.5	0	81	3.9	A	63.8	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584475.2	4821010.1	301.2	0	81	9.9	A	69.8	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584690.0	4820507.1	256.5	0	81	2.8	A	62.7	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585193.1	4821076.0	235.8	0	81	8.5	A	68.5	0.0	1.0	0.0	2.7	2.4	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584607.8	4820499.9	260.9	0	81	4.1	A	64.2	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584593.4	4820504.5	261.8	0	81	4.3	A	64.5	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	585291.4	4821136.9	233.5	0	81	9.2	A	69.4	0.0	1.0	0.0	3.0	1.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584481.2	4821051.3	303.8	0	81	9.9	A	70.1	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584480.8	4820648.6	275.2	0	81	6.8	A	67.1	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584477.3	4820700.7	279.2	0	81	7.2	A	67.5	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584477.8	4821061.7	304.7	0	81	9.8	A	70.2	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584653.0	4820498.1	258.4	0	81	3.0	A	63.4	0.0	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	19
Highway	Highway trucks onto property	584935.1	4820977.9	246.5	0	81	6.6	A	67.2	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584931.1	4820975.8	246.5	0	81	6.6	A	67.2	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584475.5	4820728.6	280.7	0	81	7.0	A	67.7	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584477.6	4820695.8	278.7	0	81	6.6	A	67.4	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584569.0	4820512.9	263.4	0	81	4.1	A	65.0	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584457.4	4820943.4	296.2	0	81	8.6	A	69.5	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584830.4	4820749.0	250.4	0	81	3.3	A	64.2	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584571.3	4820511.7	263.3	0	81	4.0	A	64.9	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	585100.3	4821037.2	238.3	0	81	7.0	A	67.9	0.0	0.9	0.0	2.6	1.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584545.3	4820529.7	265.4	0	81	4.5	A	65.4	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584846.4	4820801.4	249.5	0	81	3.9	A	64.9	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584472.0	4820766.8	283.7	0	81	7.0	A	68.0	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	585259.7	4821117.3	234.5	0	81	8.1	A	69.1	0.0	1.0	0.0	2.9	1.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584902.7	4820947.5	247.8	0	81	5.8	A	66.9	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584477.9	4820691.4	278.5	0	81	6.3	A	67.4	0.0	0.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584488.9	4820610.8	272.7	0	81	5.6	A	66.7	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584449.5	4821085.5	306.5	0	81	9.4	A	70.6	0.0	1.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585022.5	4821011.7	241.6	0	81	6.4	A	67.5	0.0	0.9	0.0	2.5	1.8	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584710.3	4820516.6	255.3	0	81	1.2	A	62.4	0.0	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584483.5	4820634.3	274.4	0	81	5.8	A	66.9	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584463.4	4820846.3	289.2	0	81	7.5	A	68.7	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584464.5	4820835.8	288.5	0	81	7.4	A	68.6	0.0	1.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584466.2	4820820.1	287.5	0	81	7.2	A	68.5	0.0	1.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584844.8	4820796.4	249.5	0	81	3.5	A	64.9	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	17

Receiver: R8  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	47

Receiver Name	Receiver ID	X	Y	Z
R8	R8	585037.2 m	4820341.9 m	244.9 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Highway	Highway trucks onto property	584837.5	4820772.1	250.2	0	81	3.2	A	64.5	0.0	0.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584479.1	4820673.9	277.1	0	81	5.9	A	67.3	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584457.2	4820929.0	295.2	0	81	7.9	A	69.3	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584752.5	4820551.9	253.5	0	81	0.6	A	62.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	18
Highway	Highway trucks onto property	584468.1	4821076.1	305.7	0	81	8.9	A	70.4	0.0	1.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584481.8	4821033.7	302.7	0	81	8.2	A	70.0	0.0	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584457.1	4820923.1	294.7	0	81	7.5	A	69.3	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584458.9	4820887.3	292.0	0	81	7.1	A	69.0	0.0	1.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584457.0	4820907.9	293.5	0	81	7.2	A	69.2	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584630.7	4820498.1	259.6	0	81	1.7	A	63.8	0.0	0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	17
Highway	Highway trucks onto property	584489.7	4820607.6	272.5	0	81	4.6	A	66.7	0.0	0.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584524.3	4820550.4	267.4	0	81	3.8	A	65.9	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584481.4	4820643.4	274.6	0	81	4.9	A	67.0	0.0	0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584459.3	4820953.9	297.0	0	81	7.4	A	69.5	0.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584469.7	4820787.7	285.3	0	81	5.8	A	68.2	0.0	0.9	0.0	2.6	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584857.4	4820837.7	249.4	0	81	3.0	A	65.4	0.0	0.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	585267.8	4821122.3	234.5	0	81	6.6	A	69.2	0.0	1.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584464.0	4820840.4	288.6	0	81	5.9	A	68.6	0.0	1.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584468.2	4820802.1	286.3	0	81	5.5	A	68.3	0.0	0.9	0.0	2.7	0.0	0.0	0.0	0.0	0.0	15
Highway	Highway trucks onto property	584845.8	4820799.5	249.5	0	81	2.1	A	64.9	0.0	0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	16
Highway	Highway trucks onto property	584878.5	4820907.1	248.5	0	81	3.1	A	66.4	0.0	0.9	0.0	2.2	0.0	0.0	0.0	0.0	0.0	15
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	75.6	0.0	-1.8	10.2	5.1	0.0	0.0	0.0	0.0	0.0	35
Dumping	Pit Truck Dumping	583959.7	4821019.7	306.0	0	117	0.0	A	73.1	0.0	-2.1	11.7	4.1	0.0	0.0	0.0	0.0	0.0	19
Dumping	Pit Truck Dumping	583959.1	4821034.4	305.9	0	117	0.0	A	73.2	0.0	-1.8	11.1	4.2	0.0	0.0	0.0	0.0	0.0	19
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	72.2	0.0	-1.8	14.8	4.9	0.0	0.0	0.0	0.0	0.0	30
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	73.1	0.0	-1.7	10.9	4.2	0.0	0.0	0.0	0.0	0.0	23
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	73.2	0.0	-1.8	10.3	4.7	0.0	0.0	0.0	0.0	0.0	35
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	80.6	0.0	-2.3	7.0	12.4	0.0	0.0	0.0	0.0	0.0	29
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	72.1	0.0	-0.3	5.1	4.7	0.0	0.0	0.0	0.0	0.0	42
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	75.3	0.0	-1.8	6.6	6.7	0.0	0.0	0.0	0.0	0.0	24

Receiver: R10  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	41

Receiver Name	Receiver ID	X	Y	Z
R10	R10	581744.2 m	4821615.9 m	323.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	77.6	0.0	-2.7	7.5	4.5	1.1	0.0	0.0	0.0	0.0	25
QuarryTruck	Quarry Truck Route Segment 2	583106.5	4821608.1	309.0	0	87	13.1	A	73.7	0.0	-2.2	6.9	4.1	2.0	0.0	0.0	0.0	0.0	15
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	74.5	0.0	-3.5	13.3	6.8	1.5	0.0	0.0	0.0	0.0	24
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	77.0	0.0	-2.1	6.9	5.6	1.3	0.0	0.0	0.0	0.0	36
Dumping	Pit Truck Dumping	583959.1	4821034.4	305.9	0	117	0.0	A	78.2	0.0	-3.2	7.9	6.4	1.4	0.0	0.0	0.0	0.0	15
Dumping	Pit Truck Dumping	583959.7	4821019.7	306.0	0	117	0.0	A	78.2	0.0	-3.2	7.9	6.4	1.4	0.0	0.0	0.0	0.0	15
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	78.6	0.0	-3.2	8.0	8.3	1.4	0.0	0.0	0.0	0.0	27
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	78.2	0.0	-2.8	7.6	6.3	1.3	0.0	0.0	0.0	0.0	19
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	78.4	0.0	-3.2	7.9	7.6	1.4	0.0	0.0	0.0	0.0	29
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	74.8	0.0	-3.7	8.4	7.9	1.8	0.0	0.0	0.0	0.0	38
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	79.2	0.0	-2.7	7.5	8.4	1.2	0.0	0.0	0.0	0.0	30
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	78.3	0.0	-2.7	7.5	8.2	1.2	0.0	0.0	0.0	0.0	18



Receiver: R11  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R11	R11	581591.2 m	4821651.9 m	325.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	78.2	0.0	-2.6	7.4	4.7	1.2	0.0	0.0	0.0	0.0	0.0	24
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	75.0	0.0	-3.4	11.6	7.1	1.7	0.0	0.0	0.0	0.0	0.0	24
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	77.6	0.0	-2.0	6.7	5.9	1.4	0.0	0.0	0.0	0.0	0.0	35
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	79.2	0.0	-3.1	7.8	8.7	1.4	0.0	0.0	0.0	0.0	0.0	26
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	78.8	0.0	-2.6	7.4	6.6	1.3	0.0	0.0	0.0	0.0	0.0	18
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	79.0	0.0	-3.1	7.8	8.0	1.4	0.0	0.0	0.0	0.0	0.0	28
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	75.4	0.0	-3.5	8.3	8.2	1.9	0.0	0.0	0.0	0.0	0.0	37
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	79.7	0.0	-2.6	7.4	8.8	1.3	0.0	0.0	0.0	0.0	0.0	29
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	78.9	0.0	-2.6	7.4	8.5	1.3	0.0	0.0	0.0	0.0	0.0	17

Receiver: R12  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	41

Receiver Name	Receiver ID	X	Y	Z
R12	R12	581483.2 m	4821755.9 m	329.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	78.6	0.0	-2.7	7.5	4.9	1.1	0.0	0.0	0.0	0.0	0.0	24
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	75.2	0.0	-3.4	11.0	7.2	1.5	0.0	0.0	0.0	0.0	0.0	25
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	78.1	0.0	-2.0	6.8	6.1	1.2	0.0	0.0	0.0	0.0	0.0	34
QuarryTruck	Quarry Truck Route Segment 6	582405.3	4822845.4	344.3	0	87	8.6	A	74.1	0.0	-0.7	0.0	4.3	1.7	0.0	0.0	0.0	0.0	0.0	16
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	79.6	0.0	-2.9	7.7	9.0	1.3	0.0	0.0	0.0	0.0	0.0	26
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	79.2	0.0	-2.6	7.4	6.8	1.2	0.0	0.0	0.0	0.0	0.0	17
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	79.4	0.0	-3.0	7.8	8.3	1.3	0.0	0.0	0.0	0.0	0.0	28
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	75.6	0.0	-3.5	8.3	8.4	1.7	0.0	0.0	0.0	0.0	0.0	37
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	80.1	0.0	-2.7	0.0	9.1	1.2	0.0	0.0	0.0	0.0	0.0	36
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	79.3	0.0	-2.5	7.3	8.7	1.1	0.0	0.0	0.0	0.0	0.0	17

Receiver: R13  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R13	R13	581606.2 m	4821934.9 m	323.1 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	78.3	0.0	-3.0	7.8	4.7	0.9	0.0	0.0	0.0	0.0	0.0	24
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	74.1	0.0	-3.8	19.9	6.6	2.5	0.0	0.0	0.0	0.0	0.0	17
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	77.8	0.0	-2.4	7.2	5.9	1.2	0.0	0.0	0.0	0.0	0.0	35
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	79.4	0.0	-3.4	8.2	8.9	0.0	0.0	0.0	0.0	0.0	0.0	27
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	79.0	0.0	-3.3	8.1	6.7	0.8	0.0	0.0	0.0	0.0	0.0	18
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	79.2	0.0	-3.5	8.4	8.2	1.0	0.0	0.0	0.0	0.0	0.0	28
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	74.6	0.0	-4.0	9.0	7.7	3.1	0.0	0.0	0.0	0.0	0.0	37
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	79.8	0.0	-3.0	7.8	8.9	0.0	0.0	0.0	0.0	0.0	0.0	30
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	78.9	0.0	-2.9	7.7	8.5	1.0	0.0	0.0	0.0	0.0	0.0	17

Receiver: R16  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R16	R16	581118.2 m	4822446.9 m	326.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	80.4	0.0	-2.6	7.3	5.5	0.0	0.0	0.0	0.0	0.0	22
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	75.7	0.0	-2.2	9.7	4.2	0.0	0.0	0.0	0.0	0.0	20
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	76.0	0.0	-2.5	7.3	7.6	0.0	0.0	0.0	0.0	0.0	28
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	80.0	0.0	-1.7	6.5	6.9	0.0	0.0	0.0	0.0	0.0	33
QuarryTruck	Quarry Truck Route Segment 6	582526.4	4822656.0	324.9	0	87	14.5	A	74.1	0.0	-2.1	6.9	4.3	0.0	0.0	0.0	0.0	0.0	18
QuarryTruck	Quarry Truck Route Segment 6	582395.2	4822833.2	343.9	0	87	11.5	A	73.5	0.0	-1.2	5.9	4.1	0.0	0.0	0.0	0.0	0.0	16
QuarryTruck	Quarry Truck Route Segment 6	582419.1	4822862.2	343.2	0	87	11.7	A	73.7	0.0	-0.6	5.4	4.2	0.0	0.0	0.0	0.0	0.0	16
QuarryTruck	Quarry Truck Route Segment 6	582403.6	4822843.4	344.2	0	87	10.9	A	73.6	0.0	-0.7	5.4	4.1	0.0	0.0	0.0	0.0	0.0	15
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	81.4	0.0	-3.0	7.8	10.3	0.0	0.0	0.0	0.0	0.0	24
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	81.0	0.0	-2.9	7.7	7.8	0.0	0.0	0.0	0.0	0.0	16
QuarryTruck	Quarry Truck to Working Face	582829.5	4822616.8	327.5	0	82	20.2	A	75.7	0.0	-2.2	7.2	4.9	0.0	0.0	0.0	0.0	0.0	17
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	81.1	0.0	-3.0	7.8	9.7	0.0	0.0	0.0	0.0	0.0	26
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	76.4	0.0	-2.6	7.4	8.9	0.0	0.0	0.0	0.0	0.0	37
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	81.6	0.0	-2.6	7.4	10.3	0.0	0.0	0.0	0.0	0.0	27
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	80.7	0.0	-2.2	7.0	9.5	0.0	0.0	0.0	0.0	0.0	16



Receiver: R17  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R17	R17	581488.2 m	4822943.9 m	328.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	80.1	0.0	-3.0	7.8	5.4	0.0	0.0	0.0	0.0	0.0	23
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	74.0	0.0	-2.9	8.0	3.6	1.9	0.0	0.0	0.0	0.0	23
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	74.2	0.0	-3.2	8.0	6.6	1.9	0.0	0.0	0.0	0.0	29
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	79.7	0.0	-2.3	7.1	6.7	0.6	0.0	0.0	0.0	0.0	32
QuarryTruck	Quarry Truck Route Segment 6	582526.4	4822656.0	324.9	0	87	14.5	A	71.6	0.0	-3.0	7.8	3.5	3.6	0.0	0.0	0.0	0.0	18
QuarryTruck	Quarry Truck Route Segment 6	582395.2	4822833.2	343.9	0	87	11.5	A	70.2	0.0	-1.3	6.1	3.1	3.3	0.0	0.0	0.0	0.0	17
QuarryTruck	Quarry Truck Route Segment 6	582419.1	4822862.2	343.2	0	87	11.7	A	70.4	0.0	-1.0	5.9	3.1	3.2	0.0	0.0	0.0	0.0	17
QuarryTruck	Quarry Truck Route Segment 6	582403.6	4822843.4	344.2	0	87	10.9	A	70.3	0.0	-0.4	5.3	3.1	3.3	0.0	0.0	0.0	0.0	16
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	81.3	0.0	-3.3	8.1	10.2	0.0	0.0	0.0	0.0	0.0	24
Crusher	Primary Crusher	583959.8	4821026.9	305.5	0	109	0.0	A	80.9	0.0	-3.3	8.0	7.8	0.0	0.0	0.0	0.0	0.0	16
QuarryTruck	Quarry Truck to Working Face	582821.3	4822625.1	327.5	0	82	17.7	A	73.7	0.0	-3.0	7.8	4.2	2.0	0.0	0.0	0.0	0.0	15
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	80.9	0.0	-3.5	8.3	9.5	0.0	0.0	0.0	0.0	0.0	26
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	74.7	0.0	-3.4	8.2	7.8	1.6	0.0	0.0	0.0	0.0	38
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	81.3	0.0	-3.1	7.8	10.1	0.0	0.0	0.0	0.0	0.0	27
Wash	Wash Plant	584071.1	4821666.0	314.0	0	111	0.0	A	80.2	0.0	-2.3	7.0	9.2	0.0	0.0	0.0	0.0	0.0	16

Receiver: R18  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R18	R18	581464.2 m	4823489.9 m	336.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	81.1	0.0	-2.8	7.6	5.8	0.0	0.0	0.0	0.0	0.0	0.0	21
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	75.5	0.0	-2.2	7.7	4.1	0.0	0.0	0.0	0.0	0.0	0.0	23
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	75.6	0.0	-2.5	7.4	7.3	0.0	0.0	0.0	0.0	0.0	0.0	29
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	80.8	0.0	-2.0	6.8	7.2	0.0	0.0	0.0	0.0	0.0	0.0	31
QuarryTruck	Quarry Truck Route Segment 6	582703.5	4822829.0	310.5	0	87	14.6	A	74.0	0.0	-2.3	7.5	4.2	0.9	0.0	0.0	0.0	0.0	0.0	17
QuarryTruck	Quarry Truck Route Segment 6	582577.4	4823001.4	328.5	0	87	12.1	A	72.7	0.0	-2.0	7.5	3.8	0.9	0.0	0.0	0.0	0.0	0.0	16
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	82.2	0.0	-3.1	7.9	11.0	0.0	0.0	0.0	0.0	0.0	0.0	22
QuarryTruck	Quarry Truck to Working Face	582829.5	4822616.8	327.5	0	82	20.2	A	75.2	0.0	-2.2	7.2	4.7	0.0	0.0	0.0	0.0	0.0	0.0	18
QuarryTruck	Quarry Truck to Working Face	582709.1	4822766.1	309.2	0	82	17.5	A	74.2	0.0	-2.2	7.4	4.3	0.9	0.0	0.0	0.0	0.0	0.0	15
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	81.8	0.0	-3.2	8.0	10.3	0.0	0.0	0.0	0.0	0.0	0.0	25
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	76.0	0.0	-2.7	7.4	8.6	0.0	0.0	0.0	0.0	0.0	0.0	38
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	82.2	0.0	-2.4	7.2	10.8	0.0	0.0	0.0	0.0	0.0	0.0	26

Receiver: R19  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	40

Receiver Name	Receiver ID	X	Y	Z
R19	R19	581450.2 m	4823568.9 m	338.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	81.3	0.0	-2.8	7.5	5.9	0.0	0.0	0.0	0.0	0.0	21
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	75.8	0.0	-2.0	6.7	4.2	0.0	0.0	0.0	0.0	0.0	23
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	75.9	0.0	-2.6	7.4	7.5	0.0	0.0	0.0	0.0	0.0	28
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	80.9	0.0	-1.9	6.7	7.3	0.0	0.0	0.0	0.0	0.0	31
QuarryTruck	Quarry Truck Route Segment 6	582526.4	4822656.0	324.9	0	87	14.5	A	74.0	0.0	-2.2	7.0	4.3	0.0	0.0	0.0	0.0	0.0	18
QuarryTruck	Quarry Truck Route Segment 6	582703.5	4822829.0	310.5	0	87	14.6	A	74.3	0.0	-2.3	7.3	4.3	0.0	0.0	0.0	0.0	0.0	18
QuarryTruck	Quarry Truck Route Segment 6	582541.1	4823004.2	328.4	0	87	12.3	A	72.8	0.0	-1.8	8.6	3.8	0.0	0.0	0.0	0.0	0.0	15
QuarryTruck	Quarry Truck Route Segment 6	582577.4	4823001.4	328.5	0	87	12.1	A	73.0	0.0	-1.7	7.2	3.9	0.0	0.0	0.0	0.0	0.0	16
QuarryTruck	Quarry Truck Route Segment 6	582419.1	4822862.2	343.2	0	87	11.7	A	72.6	0.0	-1.3	6.1	3.8	0.0	0.0	0.0	0.0	0.0	17
QuarryTruck	Quarry Truck Route Segment 6	582395.2	4822833.2	343.9	0	87	11.5	A	72.6	0.0	1.0	4.2	3.8	0.0	0.0	0.0	0.0	0.0	17
QuarryTruck	Quarry Truck Route Segment 6	582403.6	4822843.4	344.2	0	87	10.9	A	72.6	0.0	1.2	4.0	3.8	0.0	0.0	0.0	0.0	0.0	16
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	82.4	0.0	-3.1	7.8	11.1	0.0	0.0	0.0	0.0	0.0	22
QuarryTruck	Quarry Truck to Working Face	582829.5	4822616.8	327.5	0	82	20.2	A	75.5	0.0	-2.3	7.1	4.8	0.0	0.0	0.0	0.0	0.0	18
QuarryTruck	Quarry Truck to Working Face	582709.1	4822766.1	309.2	0	82	17.5	A	74.5	0.0	-2.3	7.4	4.4	0.0	0.0	0.0	0.0	0.0	16
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	82.0	0.0	-3.2	8.0	10.4	0.0	0.0	0.0	0.0	0.0	24
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	76.2	0.0	-2.9	7.7	8.8	0.0	0.0	0.0	0.0	0.0	37
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	82.3	0.0	-2.3	7.1	10.9	0.0	0.0	0.0	0.0	0.0	26

Receiver: R21  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	38

Receiver Name	Receiver ID	X	Y	Z
R21	R21	581551.2 m	4823892.9 m	347.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	81.7	0.0	-2.4	7.2	6.0	0.0	0.0	0.0	0.0	0.0	20
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	76.5	0.0	-2.2	7.0	4.5	0.8	0.0	0.0	0.0	0.0	21
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	76.5	0.0	-2.4	7.1	7.8	0.9	0.0	0.0	0.0	0.0	26
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	81.4	0.0	-1.6	6.4	7.5	0.5	0.0	0.0	0.0	0.0	30
QuarryTruck	Quarry Truck Route Segment 6	582703.5	4822829.0	310.5	0	87	14.6	A	74.9	0.0	-1.7	6.5	4.6	1.1	0.0	0.0	0.0	0.0	16
QuarryTruck	Quarry Truck Route Segment 6	582526.4	4822656.0	324.9	0	87	14.5	A	74.9	0.0	-1.6	7.0	4.6	1.0	0.0	0.0	0.0	0.0	15
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	82.8	0.0	-2.8	7.5	11.5	0.0	0.0	0.0	0.0	0.0	21
QuarryTruck	Quarry Truck to Working Face	582829.5	4822616.8	327.5	0	82	20.2	A	76.1	0.0	-2.0	6.8	5.1	0.9	0.0	0.0	0.0	0.0	16
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	82.4	0.0	-2.9	7.6	10.8	0.0	0.0	0.0	0.0	0.0	24
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	76.8	0.0	-2.4	7.2	9.2	0.9	0.0	0.0	0.0	0.0	36
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	82.7	0.0	-2.4	7.1	11.2	0.0	0.0	0.0	0.0	0.0	25

Receiver: R22  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	37

Receiver Name	Receiver ID	X	Y	Z
R22	R22	581859.2 m	4824230.9 m	347.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr	
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	81.9	0.0	-2.4	7.2	6.1	0.0	0.0	0.0	0.0	0.0	0.0	20
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	76.9	0.0	-2.0	6.8	4.6	0.8	0.0	0.0	0.0	0.0	0.0	21
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	76.8	0.0	-2.3	7.1	8.0	0.9	0.0	0.0	0.0	0.0	0.0	26
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	81.6	0.0	-1.4	6.1	7.6	0.5	0.0	0.0	0.0	0.0	0.0	30
QuarryTruck	Quarry Truck Route Segment 6	582703.5	4822829.0	310.5	0	87	14.6	A	75.3	0.0	-1.7	6.5	4.7	1.0	0.0	0.0	0.0	0.0	0.0	15
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	83.0	0.0	-2.6	7.3	11.6	0.0	0.0	0.0	0.0	0.0	0.0	21
QuarryTruck	Quarry Truck to Working Face	582829.5	4822616.8	327.5	0	82	20.2	A	76.5	0.0	-2.0	6.7	5.2	0.9	0.0	0.0	0.0	0.0	0.0	15
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	82.5	0.0	-2.5	7.3	10.9	0.0	0.0	0.0	0.0	0.0	0.0	23
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	77.0	0.0	-2.3	7.1	9.4	0.9	0.0	0.0	0.0	0.0	0.0	35
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	82.8	0.0	-2.1	6.9	11.3	0.0	0.0	0.0	0.0	0.0	0.0	25



Receiver: R23  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	37

Receiver Name	Receiver ID	X	Y	Z
R23	R23	581755.1 m	4824254.7 m	346.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	82.1	0.0	-2.4	7.2	6.2	0.0	0.0	0.0	0.0	0.0	20
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	77.2	0.0	-2.0	6.8	4.8	0.8	0.0	0.0	0.0	0.0	20
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	77.2	0.0	-2.3	7.1	8.2	0.9	0.0	0.0	0.0	0.0	25
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	81.8	0.0	-1.3	6.1	7.7	0.0	0.0	0.0	0.0	0.0	30
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	83.1	0.0	-2.6	7.3	11.8	0.0	0.0	0.0	0.0	0.0	21
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	82.7	0.0	-2.6	7.4	11.1	0.0	0.0	0.0	0.0	0.0	23
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	77.4	0.0	-2.3	7.1	9.6	0.9	0.0	0.0	0.0	0.0	35
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	83.0	0.0	-2.1	6.9	11.4	0.0	0.0	0.0	0.0	0.0	24

Receiver: R24  
 Project: Milton Quarry East Extension  
 Project Number: 21004

Time Period	Total (dBA)
Day	37

Receiver Name	Receiver ID	X	Y	Z
R24	R24	581676.4 m	4824343.7 m	347.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Shipping	Shipping Loaders	583856.7	4821346.8	307.5	0	116	0.0	A	82.4	0.0	-2.4	7.2	6.3	0.0	0.0	0.0	0.0	0.0	20
D04_Excavator	CAT 330L Excavator	582840.2	4822532.9	327.5	0	108	0.0	A	77.7	0.0	-1.9	6.7	5.0	0.0	0.0	0.0	0.0	0.0	20
Loader	Extraction Loader	582891.9	4822572.7	327.5	0	116	0.0	A	77.6	0.0	-2.2	7.0	8.5	0.0	0.0	0.0	0.0	0.0	25
PortPlantLrg	Large Portable Plant	583716.8	4821397.8	309.0	0	124	0.0	A	82.1	0.0	-1.3	6.0	7.9	0.0	0.0	0.0	0.0	0.0	29
QuarryTruck	Quarry Truck Route Segment 6	582703.5	4822829.0	310.5	0	87	14.6	A	76.3	0.0	-1.6	6.4	5.1	0.0	0.0	0.0	0.0	0.0	15
PortPlant	Portable Plant	584040.8	4820913.5	306.8	0	120	0.0	A	83.4	0.0	-2.5	7.3	12.0	0.0	0.0	0.0	0.0	0.0	20
Crusher2	Secondary Crusher	584058.3	4821167.9	310.3	0	122	0.0	A	83.0	0.0	-2.6	7.4	11.4	0.0	0.0	0.0	0.0	0.0	22
Drill	Three Pantera	582973.8	4822563.5	342.5	0	127	0.0	A	77.9	0.0	-2.3	7.0	10.0	0.0	0.0	0.0	0.0	0.0	35
Screens	Sorting Facility	584264.2	4821177.0	326.0	0	124	0.0	A	83.2	0.0	-2.1	6.9	11.7	0.0	0.0	0.0	0.0	0.0	24

Project: Milton Quarry East Extension  
Project Number: 21004

Source D	Source Name	Point o Reception R1		Point o Reception R2		Point o Reception R3		Point o Reception R4		Point o Reception R5		Point o Reception R6		Point o Reception R7	
		Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D
Shipping	Shipping Loaders	2735	23	2764	23	2110	24	1162	18	1022	17	1072	17	1599	18
QuarryTruck	Quarry Truck Route Segment 2	2520	18	2644	21	2227	23	1759	18	1811	19	1884	20	2513	23
D04 Excavator	CAT 330L Excavator	1932	10	2117	12	1938	13	1964	6	2182	4	2269	4	3021	5
Loader	Extraction Loader	1869	13	2052	15	1875	16	1924	10	2152	8	2240	8	2999	8
Highway	Highway trucks onto property	2961	15	2967	15	2232	18	1087	18	839	37	793	37	707	44
Highway	Highway trucks onto property	3335	18	3286	17	2500	23	1270	33	774	14	786	14	1138	25
QuarryTruck	Quarry Truck Route Segment 3	2361	8	2518	10	2209	14	1943	8	2059	6	2138	7	2815	12
QuarryTruck	Quarry Truck Route Segment 1	2858	18	2911	19	2299	22	1416	20	1285	17	1333	18	1815	25
PortPlantLg	Large Portable Plant	2695	33	2739	33	2117	35	1244	29	1144	32	1200	32	1747	34
QuarryTruck	Quarry Truck Route Segment 6	1917	16	2148	21	2145	23	2366	19	2616	15	2705	16	3471	19
Dumping	Pit Truck Dumping	3044	13	3060	13	2373	16	1318	13	1067	12	1092	12	1443	21
Dumping	Pit Truck Dumping	3058	13	3075	13	2387	16	1329	13	1075	12	1099	12	1445	17
PortPlant	Portable Plant	3165	24	3173	24	2470	28	1372	23	1080	24	1092	26	1380	30
Crusher	Primary Crusher	3051	16	3066	16	2291	16	1323	16	1071	15	1095	16	1444	21
QuarryTruck	Quarry Truck to Working Face	1852	8	2058	8	1960	11	2092	8	2342	5	2431	6	3196	8
Crusher2	Secondary Crusher	2911	27	2918	27	2219	28	1152	25	912	23	942	23	1383	28
Drill	Three Pantera	1820	26	2005	32	1805	37	1843	37	2075	28	2163	30	2926	30
Screens	Sorting Facility	2913	29	2900	29	2168	34	1034	39	740	31	760	31	1165	42
QuarryTruck	Quarry Truck Route Segment 4	2356	7	2531	10	2282	12	2098	6	2235	5	2315	6	3001	10
Wash	Wash Plant	2413	19	2421	19	1737	23	802	15	764	17	838	18	1520	23
QuarryTruck	Quarry Truck Route Segment 5	2109	8	2296	10	2107	10	2066	7	2254	5	2339	5	3068	8
<b>Total Level [dBA]</b>		<b>37</b>		<b>38</b>		<b>41</b>		<b>42</b>		<b>40</b>		<b>40</b>		<b>47</b>	

Source D	Source Name	Point o Reception R8		Point o Reception R10		Point o Reception R11		Point o Reception R12		Point o Reception R13		Point o Reception R16		Point o Reception R17	
		Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D
Shipping	Shipping Loaders	1552	21	2130	25	2296	24	2409	24	2326	24	2651	22	2857	23
QuarryTruck	Quarry Truck Route Segment 2	2459	23	1289	29	1437	28	1542	27	1431	24	2028	27	1944	25
D04 Excavator	CAT 330L Excavator	3104	5	1429	13	1528	13	1564	14	1371	9	1724	20	1413	23
Loader	Extraction Loader	3098	8	1484	24	1594	24	1628	25	1435	17	1778	28	1452	29
Highway	Highway trucks onto property	583	45	2583	16	2740	15	2868	14	2795	16	3430	13	3338	13
Highway	Highway trucks onto property	1082	18	3063	16	3220	17	3352	17	3291	11	3636	15	3853	13
QuarryTruck	Quarry Truck Route Segment 3	2798	13	1145	22	1278	21	1352	22	1204	20	1736	25	1605	21
QuarryTruck	Quarry Truck Route Segment 1	1688	25	1901	24	2059	23	2190	23	2121	23	2789	21	2720	21
PortPlantLg	Large Portable Plant	1692	35	1985	36	2141	35	2282	34	2178	35	2802	33	2712	32
QuarryTruck	Quarry Truck Route Segment 6	3665	20	1460	29	1517	29	1508	30	1295	28	1460	32	1032	31
Dumping	Pit Truck Dumping	1274	19	2290	16	2447	15	2579	14	2519	15	3173	12	3123	13
Dumping	Pit Truck Dumping	1283	19	2284	15	2451	15	2584	14	2525	15	3180	12	3132	13
PortPlant	Portable Plant	1150	30	2402	27	2558	26	2693	26	2640	27	3300	24	3262	24
Crusher	Primary Crusher	1278	23	2293	19	2450	18	2582	17	2523	18	3177	16	3128	16
QuarryTruck	Quarry Truck to Working Face	3296	9	1486	15	1569	16	1586	16	1383	10	1649	21	1291	22
Crusher2	Secondary Crusher	1282	35	2357	29	2514	28	2641	28	2569	28	3206	26	3124	26
Drill	Three Pantera	3034	29	1552	38	1696	37	1695	37	1926	37	1859	37	1534	38
Screens	Sorting Facility	1141	42	2568	30	2715	29	2841	38	2764	30	3393	27	3291	27
QuarryTruck	Quarry Truck Route Segment 4	2988	9	1054	22	1173	21	1235	20	1070	15	1567	20	1416	19
Wash	Wash Plant	1641	24	2327	18	2490	17	2589	17	2480	17	3054	16	2882	16
QuarryTruck	Quarry Truck Route Segment 5	3111	13	1256	27	1356	26	1392	26	1206	21	1597	26	1335	26
<b>Total Level [dBA]</b>		<b>47</b>		<b>42</b>		<b>41</b>		<b>42</b>		<b>41</b>		<b>41</b>		<b>41</b>	

Source D	Source Name	Point o Reception R18		Point o Reception R19		Point o Reception R21		Point o Reception R22		Point o Reception R23		Point o Reception R24	
		Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D	Dis ance o POR (m)	Sound Level a POR (dBA) D
Shipping	Shipping Loaders	3212	21	3276	21	3435	20	3508	20	3588	20	3706	20
QuarryTruck	Quarry Truck Route Segment 2	2335	23	2403	24	2598	23	2738	21	2805	21	2920	21
D04 Excavator	CAT 330L Excavator	1676	23	1734	23	1874	21	1961	21	2035	20	2153	20
Loader	Extraction Loader	1697	29	1752	28	1882	26	1954	26	2030	25	2148	25
Highway	Highway trucks onto property	3685	11	3747	12	3896	11	3948	11	4031	11	4150	10
Highway	Highway trucks onto property	4198	9	4280	14	4403	14	4442	14	4528	14	4646	13
QuarryTruck	Quarry Truck Route Segment 3	1978	20	2050	20	2244	22	2392	16	2457	16	2572	16
QuarryTruck	Quarry Truck Route Segment 1	3107	19	3174	19	3355	18	3462	17	3536	17	3653	17
PortPlantLg	Large Portable Plant	3074	31	3139	31	3304	30	3388	30	3466	30	3584	29
QuarryTruck	Quarry Truck Route Segment 6	1225	31	1279	33	1411	31	1517	30	1586	30	1702	30
Dumping	Pit Truck Dumping	3501	11	3566	11	3738	10	3825	10	3903	10	4020	9
Dumping	Pit Truck Dumping	3511	11	3577	11	3749	10	3837	10	3915	10	4033	9
PortPlant	Portable Plant	3844	22	3710	22	3883	21	3971	21	4048	21	4166	20
Crusher	Primary Crusher	3506	14	3572	14	3744	13	3831	13	3909	13	4027	12
QuarryTruck	Quarry Truck to Working Face	1501	23	1555	23	1684	21	1756	21	1835	20	1947	20
Crusher2	Secondary Crusher	3482	25	3545	24	3703	24	3771	23	3852	23	3970	22
Drill	Three Pantera	1771	38	1825	37	1947	36	2006	35	2085	35	2203	35
Screens	Sorting Facility	3632	26	3693	26	3839	25	3887	25	3971	24	4090	24
QuarryTruck	Quarry Truck Route Segment 4	1798	17	1867	17	2069	18	2234	14	2295	14	2408	14
Wash	Wash Plant	3182	14	3239	15	3363	14	3387	13	3474	14	3593	13
QuarryTruck	Quarry Truck Route Segment 5	1656	25	1722	25	1892	23	2013	19	2080	19	2196	19
<b>Total Level [dBA]</b>		<b>41</b>		<b>41</b>		<b>39</b>		<b>38</b>		<b>38</b>		<b>38</b>	

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**Appendix C**  
Qualifications of the Authors

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## **Derek Flake**     **M.Sc., P.Eng.**

### **Profile**

Derek is an employee of Aercoustics Engineering Limited, an engineering consulting company specializing in acoustics, noise and vibration. Prior to that, he worked for several years at another acoustics, noise and vibration firm and he completed a Master of Science in the field of ultrasound transducer design. Derek is a Professional Engineer with the Professional Engineers Ontario.

Derek has been recognized by the Local Planning Appeal Tribunal (LPAT) and previously by the Ontario Municipal Board (OMB) as an expert in environmental noise and has provided expert opinion testimony to the Board and in civil litigation.

### **Employment History**

2012 – Present     Acoustical Engineer, Aercoustics Engineering Limited

2009 – 2012     Engineering Intern, Jade Acoustics Incorporated

### **Additional Activities / Committees**

2019 – Present     Officer on the Board of Directors and Chair of the Membership Committee at the Air & Waste Management Association (A&WMA) Ontario Section (OS)

2018 – Present     Member of Environment Committee at the Ontario Sand, Stone and Gravel Association (OSSGA)

2014 – Present     Member of Training and Development Committee at the Ontario Sand, Stone and Gravel Association (OSSGA)

### **Education**

Master of Science (M.Sc.)     Medical Biophysics (Ultrasound Physics)  
University of Toronto

Bachelor of Applied Science (B.A.Sc.)     Engineering Physics (Mechanical)  
Queen's University



### **Professional Registration / Affiliations**

Licensed Professional Engineer with the Professional Engineers of Ontario (PEO)

### **Courses and Speaking Events**

Instructor, Municipal Law Enforcement Officers' Association (MLEOA) Environmental Noise training courses. This is an annual four-day training program which provides the officers with an understanding of sound measurement and its relationship with environmental noise impact. The officer is trained in the utilization of technical equipment required in the application of sound measurement theories. This course also covers the unique elements of qualitative noise regulations and is authorized by the Ministry of the Environment and Climate Change.

Speaker, "Overview of Noise & Vibration Issues in Land-Use Planning", A&WMA OS Environment Issues in Land-Use Planning, Guelph, October 30, 2019.

Attended A&WMA Course "Consultant Liability and Expert Witness Testimony", Guelph, 2019.

Speaker, "Environmental Noise: Modelling Techniques to Quiet your Acoustic Troubles", ACE 2019, Quebec City, 2019.

Attended PSMJ Resources Project Management Bootcamp, Toronto, 2016.

Attended OSSGA Health and Safety Seminar courses "*Aggregates 101*" and "*Aggregates 201*", Toronto, 2015. Mr. Flake both attended and aided in the development for parts of the course.

Speaker, "*The New NPC-300 Noise Guideline: What does it mean for your noise by-law?*" MLEOA Annual General Meeting, Kingston, 2014.

### **Professional Activities**

#### ***Land Use Planning***

In the field of environmental acoustics, Mr. Flake has completed numerous projects involving noise impact from planned stationary sources as well as noise impact studies for proposed new noise sensitive uses. These projects included conducting studies for proposed operations and developments and addressing noise concerns for existing operations. Peer reviews of noise studies prepared by other acoustic consultants were also conducted by Mr. Flake. In the land use planning process, Mr. Flake has completed studies which provide assessments of the noise impact on proposed residential, commercial, institutional and industrial developments from the local environment which includes noise from road, rail, and aircraft traffic and stationary noise sources such as industrial and commercial uses. Also, vibration measurements and studies were conducted to assess vibration from rail traffic such as trains, streetcars and subways. The studies include recommendations for noise control of the sources, dwelling building components, wall, window, and door constructions to satisfy the Ministry of Environment, Conservation and Parks noise guidelines.

In addition, Mr. Flake has conducted architectural drawing reviews and provided design advice for residential and commercial developments. These have ensured the construction plans will meet the municipal and Ontario Building Code requirements.

#### ***Environmental Compliance Approvals & EASR***

Mr. Flake was involved in noise and vibration impact studies for industrial, institutional and commercial uses. He has prepared Acoustic Assessment Reports for use in applications for Environmental Compliance Approvals (ECA) and the Environmental Activity & Sector Registry (EASR). These studies provided conceptual as well as detailed designs of noise mitigation to reduce in-plant noise or noise emission into the environment. In-plant projects generally involved noise surveys, detailed noise and vibration measurements of equipment, data analysis and computer modelling of noise controls to evaluate effectiveness. In some cases, detailed designs and specifications have been provided. Mr. Flake has a good record of submitting applications that are accepted as fully complete according to MECP records.

#### ***Aggregates***

Mr. Flake has done work in the aggregates industry which involved the preparation and support of noise impact studies to determine technical feasibility of aggregate licence applications to the Ministry of Natural Resources & Forestry. This work included preparing the noise impact studies, supporting the findings at public meetings, and performing acoustic audits to confirm compliance with the noise requirements.

#### ***Mining***

Mr. Flake has acted as a third-party peer reviewer for the City of Timmins, overseeing all aspects of environmental compliance (including acoustics, noise & vibration) for the Hollinger Pit Open Mine in Timmins.

Acoustic Audits were also conducted at Goldcorp's Red Lake Balmerton & Cochenour sites.

#### ***Renewable Energy***

Mr. Flake has performed IEC 61400 testing of Wind Turbines and Transformer Station noise audits.

#### ***Noise Source Investigations and Room Acoustics***

Mr. Flake has completed several projects involving design of spaces where sound privacy and room acoustics were critical. These projects have included noise complaint investigation, room acoustics, mechanical noise, noise measurements to quantify sound isolation, and environmental noise impact. Examples of spaces include cinemas, offices, hospitals and residential condominiums.

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**End of Report**

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